


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>							
<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER 4-5D-45 BTR							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT							
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME OF OPERATOR BILL BARRETT CORP						7. OPERATOR PHONE 303 312-8164							
8. ADDRESS OF OPERATOR 1099 18th Street Ste 2300, Denver, CO, 80202						9. OPERATOR E-MAIL BHilgers@billbarrettcorp.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 1420H626261			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Uintah and Ouray			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		755 FNL 1292 FWL		NWNW		5		4.0 S		5.0 W		U	
Top of Uppermost Producing Zone		810 FNL 812 FWL		NWNW		5		4.0 S		5.0 W		U	
At Total Depth		810 FNL 810 FWL		NWNW		5		4.0 S		5.0 W		U	
21. COUNTY DUCESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 810			23. NUMBER OF ACRES IN DRILLING UNIT 640							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1699			26. PROPOSED DEPTH MD: 8848 TVD: 8814							
27. ELEVATION - GROUND LEVEL 5782			28. BOND NUMBER LPM8874725			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-180							
<b>Hole, Casing, and Cement Information</b>													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight		
Cond	26	16	0 - 80	65.0	Unknown	8.8	Unknown		0	0.0	0.0		
Surf	14.75	10.75	0 - 2800	45.5	J-55 ST&C	8.8	Halliburton Light , Type Unknown		720	3.16	11.0		
							Halliburton Premium , Type Unknown		360	1.36	14.8		
Prod	9.625	5.5	0 - 8848	17.0	P-110 LT&C	9.7	Unknown		960	2.31	11.0		
							Unknown		990	1.42	13.5		
<b>ATTACHMENTS</b>													
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME Venessa Langmacher				TITLE Senior Permit Analyst				PHONE 303 312-8172					
SIGNATURE				DATE 02/21/2012				EMAIL vlangmacher@billbarrettcorp.com					
API NUMBER ASSIGNED 43013512420000				APPROVAL  Permit Manager									

**DRILLING PLAN**

BILL BARRETT CORPORATION

**4-5D-45 BTR Well Pad**

Lot 4 (NW NW), 755' FNL and 1292' FWL, Section 5, T4S-R5W, USB&amp;M (surface hole)

Lot 4 (NW NW), 810' FNL and 810' FWL, Section 5, T4S-R5W, USB&amp;M (bottom hole)

Duchesne County, Utah

**1 - 2. Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals**

<b><u>Formation</u></b>	<b><u>Depth – MD</u></b>	<b><u>Depth – TVD</u></b>
Lower Green River*	5,113'	5,089'
Douglas Creek	6,002'	5,969'
Black Shale	6,813'	6,779'
Castle Peak	7,028'	6,994'
Uteland Butte	7,343'	7,309'
Wasatch*	7,583'	7,549'
TD	8,848'	8,814'

\*PROSPECTIVE PAY

Members of the Wasatch and the Lower Green River are primary objectives for oil/gas.

Base of Useable Water = 289'

**3. BOP and Pressure Containment Data**

<b><u>Depth Intervals</u></b>	<b><u>BOP Equipment</u></b>
0 – 2,800'	No pressure control required
2,800' – TD	11" 5000# Ram Type BOP 11" 5000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 5,000 psi. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The BLM and the State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up To operate most efficiently in this manner.	

**4. Casing Program**

<b><u>Hole Size</u></b>	<b><u>SETTING DEPTH</u></b>		<b><u>Casing Size</u></b>	<b><u>Casing Weight</u></b>	<b><u>Casing Grade</u></b>	<b><u>Thread</u></b>	<b><u>Condition</u></b>
<b><u>(FROM)</u></b>	<b><u>(TO)</u></b>						
26"	Surface	80'	16"	65#			
14 3/4"	Surface	2,800'	10-3/4"	45.5#	J or K 55	BT&C	New
9-7/8" & 8-3/4"	Surface	TD	5 1/2"	17#	P-110	LT&C	New
<b>NOTE: If necessary due to lost circulation, BBC would like to request the option to set 7-5/8", 33.70# P-110 LT&amp;C to a depth of 6000', then drill a 6-1/2" hole to TD and run 5-1/2" casing as a 3000' liner (200' liner lap).</b>							

Bill Barrett Corporation  
Drilling Program  
#4-5D-45 BTR  
Duchesne County, Utah

#### 4. Cementing Program

<u>Casing</u>	<u>Cement</u>
16" Conductor Casing	Grout
14-3/4" hole for 10-3/4" Surface Casing	<p><i>Lead</i> with approximately 720 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft<sup>3</sup>/sx) circulated to surface with 75% excess. TOC @ Surface</p> <p><i>Tail</i> with approximately 360 sx Halliburton Premium cement with additives mixed at 14.8 ppg (yield = 1.36 ft<sup>3</sup>/sx). Calculated hole volume with 75% excess. TOC @ 2,300'</p>
9-7/8 hole for 5 1/2" Production Casing May reduce hole size to 8-3/4" at 6000' if minimal hole problems.	<p><i>Lead</i> with approximately 960 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft<sup>3</sup>/sx). TOC @ 2,300'</p> <p><i>Tail</i> with approximately 990 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft<sup>3</sup>/sx). TOC @ 6,313'</p>
<p><b>NOTE: If 7-5/8" casing is necessary, cement with Lead with approximately 700 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft<sup>3</sup>/sx). Tail with approximately 240 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft<sup>3</sup>/sx). Planned TOC surface. We will perform a FIT to 10.2 ppg after drilling 20' of new hole.</b></p> <p><b>The 5-1/2" liner would be cemented with 300 sx of Class G 50/50 Poz w/ 2% gel (14.2 ppg) with additives from TD to 200' above TOL.</b></p>	

#### 6. Mud Program

<u>Interval</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss (API filtrate)</u>	<u>Remarks</u>
0' – 80'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
80' – 2,800'	8.3 – 8.8	26 – 36	NC	Freshwater Spud Mud Fluid System
2,800' – TD	8.6 – 9.7	42 – 52	20 cc or less	DAP Polymer Fluid System
<p><b>Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kicks" will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.</b></p>				

#### 7. Testing, Logging and Core Programs

Cores	None anticipated
Testing	None anticipated; drill stem tests may be run on shows of interest;
Sampling	30' to 50' samples; surface casing to TD. Preserve samples all show intervals;
Surveys	MWD as needed to land wellbore;
Logging	DIL-GR-SP, FDC-CNL-GR-CALIPER-Pe-Microlog, Sonic-GR (all TD to surface). FMI & Sonic Scanner to be run at geologist's discretion.
<p><b>NOTE: If BBC pursues the "Alternate" program, a suite of the above logs will be run on both the intermediate and production hole sections.</b></p>	

Bill Barrett Corporation  
Drilling Program  
#4-5D-45 BTR  
Duchesne County, Utah

**8. Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 4446 psi\* and maximum anticipated surface pressure equals approximately 2507 psi\*\* (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

\*Max Mud Wt x 0.052 x TD = A (bottom hole pressure)

\*\*Maximum surface pressure = A – (0.22 x TD)

**9. Auxiliary Equipment**

- a) Upper kelly cock; lower Kelly cock will be installed while drilling
- b) Inside BOP or stab-in valve (available on rig floor)
- c) Safety valve(s) and subs to fit all string connections in use
- d) Mud monitoring will be visually observed

**10. Location and Type of Water Supply**

Water for the drilling and completion will be trucked from the Duchesne City Culinary Water Dock located in Sec. 1, T4S, R5W.

**11. Drilling Schedule**

Location Construction:	June 2012
Spud:	June 2012
Duration:	15 days drilling time
	45 days completion time





# Bill Barrett Corporation

## LAKE CANYON & BLACK TAIL RIDGE CEMENT VOLUMES

AS OF: 2/18/2011

Well Name: 4-5D-45 BTR

### Surface Hole Data:

Total Depth:	2,800'
Top of Cement:	0'
OD of Hole:	14.750"
OD of Casing:	10.750"

### Calculated Data:

Lead Volume:	2239.2	ft <sup>3</sup>
Lead Fill:	2,300'	
Tail Volume:	486.8	ft <sup>3</sup>
Tail Fill:	500'	

### Cement Data:

Lead Yield:	3.16	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Lead:	0'	

### Calculated # of Sacks:

# SK's Lead:	720
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Tail Yield:	1.36	ft <sup>3</sup> /sk
% Excess:	75%	
Top of Tail:	2,300'	

# SK's Tail:	360
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### Production Hole Data:

Total Depth:	8,848'
Top of Cement:	2,300'
Top of Tail:	6,313'
OD of Hole:	9.875"
OD of Casing:	5.500"

### Calculated Data:

Lead Volume:	2208.4	ft <sup>3</sup>
Lead Fill:	4,013'	
Tail Volume:	1395.2	ft <sup>3</sup>
Tail Fill:	2,535'	

### Cement Data:

Lead Yield:	2.31	ft <sup>3</sup> /sk
Tail Yield:	1.42	ft <sup>3</sup> /sk
% Excess:	50%	

### Calculated # of Sacks:

# SK's Lead:	960
# SK's Tail:	990

<b>4-5D-45 BTR Proposed Cementing Program</b>
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<u>Job Recommendation</u>	<u>Surface Casing</u>
<b>Lead Cement - (2300' - 0')</b>	
Halliburton Light Premium	Fluid Weight: 11.0 lbm/gal
5.0 lbm/sk Silicalite Compacted	Slurry Yield: 3.16 ft <sup>3</sup> /sk
0.25 lbm/sk Kwik Seal	Total Mixing Fluid: 19.48 Gal/sk
0.125 lbm/sk Poly-E-Flake	Top of Fluid: 0'
2.0% Bentonite	Calculated Fill: 2,300'
	Volume: 398.79 bbl
	<b>Proposed Sacks: 720 sks</b>
<b>Tail Cement - (TD - 2300')</b>	
Premium Cement	Fluid Weight: 14.8 lbm/gal
2.0% Calcium Chloride	Slurry Yield: 1.36 ft <sup>3</sup> /sk
	Total Mixing Fluid: 6.37 Gal/sk
	Top of Fluid: 2,300'
	Calculated Fill: 500'
	Volume: 86.69 bbl
	<b>Proposed Sacks: 360 sks</b>

<u>Job Recommendation</u>	<u>Production Casing</u>
<b>Lead Cement - (6313' - 2300')</b>	
Tuned Light <sup>TM</sup> System	Fluid Weight: 11.0 lbm/gal
	Slurry Yield: 2.31 ft <sup>3</sup> /sk
	Total Mixing Fluid: 10.65 Gal/sk
	Top of Fluid: 2,300'
	Calculated Fill: 4,013'
	Volume: 393.30 bbl
	<b>Proposed Sacks: 960 sks</b>
<b>Tail Cement - (8848' - 6313')</b>	
Econocem <sup>TM</sup> System	Fluid Weight: 13.5 lbm/gal
0.125 lbm/sk Poly-E-Flake	Slurry Yield: 1.42 ft <sup>3</sup> /sk
1.0 lbm/sk Granulite TR 1/4	Total Mixing Fluid: 6.61 Gal/sk
	Top of Fluid: 6,313'
	Calculated Fill: 2,535'
	Volume: 248.47 bbl
	<b>Proposed Sacks: 990 sks</b>

## **PRESSURE CONTROL EQUIPMENT – Schematic Attached**

**A. Type: Eleven (11) Inch Double Gate Hydraulic BOP with Eleven (11) Inch Annular Preventer.** The blow out preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Drilling spool with two (2) side outlets (choke side 3-inch minimum, kill side 2-inch minimum).
4. 3-inch diameter choke line.
5. Two (2) choke line valves (3-inch minimum).
6. Kill line (2-inch minimum).
7. Two (2) chokes with one (1) remotely controlled from the rig floor.
8. Two (2) kill line valves, and a check valve (2-inch minimum).
9. Upper and lower kelly cock valves with handles available.
10. Safety valve(s) & subs to fit all drill string connections in use.
11. Inside BOP or float sub available.
12. Pressure gauge on choke manifold.
13. Fill-up line above the uppermost preventer.

**B. Pressure Rating:** 5,000 psi

### **C. Testing Procedure:**

#### Annular Preventer

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition, the Annular Preventer will be functionally operated at least weekly.

#### Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be

maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

**D. Choke Manifold Equipment:**

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

**E. Accumulator:**

The accumulator will have sufficient capacity to open the hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of closing unit pumps. The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity and the fluid level of the reservoir will be maintained at the manufacturer's recommendations.

The BOP system will have two (2) independent power sources to close the preventers. Nitrogen bottles (3 minimum) will be one (1) of these independent power sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in the *Onshore Oil & Gas Order Number 2*.

A manual locking device (i.e. hand wheels) or automatic locking device will be installed on all systems of 2M or greater. A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls for all 3M or greater systems will be capable of closing all preventers. Remote controls for 5M or greater systems will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

**F. Miscellaneous Information:**

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head but readily accessible to the driller. Exact locations and configurations of the hydraulic BOP closing unit will depend upon the particular rig contracted to drill this hole.

A flare line will be installed after the choke manifold, extending 125 feet (minimum) from the center of the drill hole to a separate flare pit.

T4S, R5W, U.S.B.&M.

BILL BARRETT CORPORATION

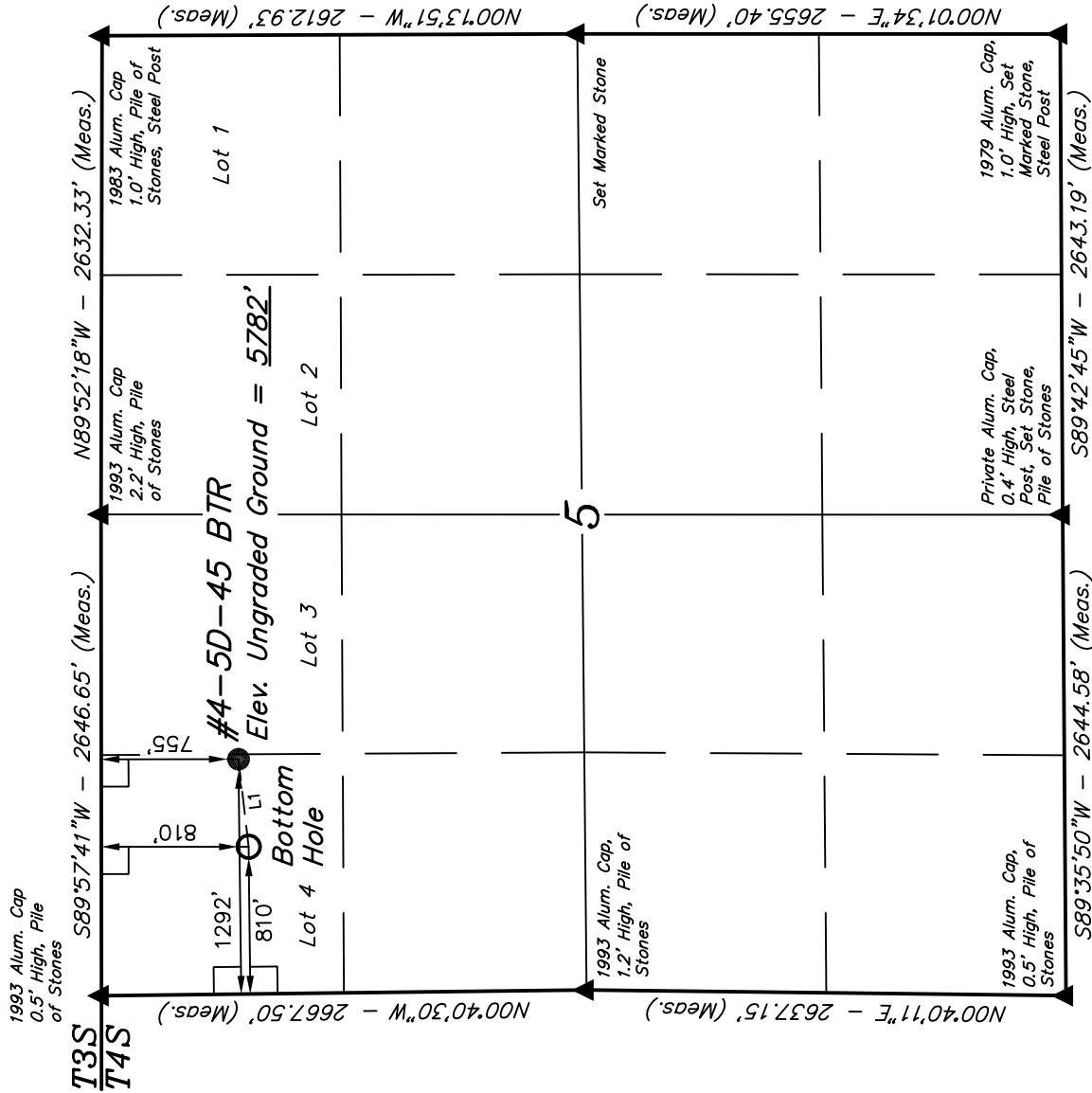
Well location, #4-5D-45 BTR, located as shown in Lot 4 of Section 5, T4S, R5W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BENCH MARK (M67) LOCATED IN THE SW 1/4 OF SECTION 9, T5S, R4W, U.S.B.&M., TAKEN FROM THE DUCHESNE SE, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6097 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

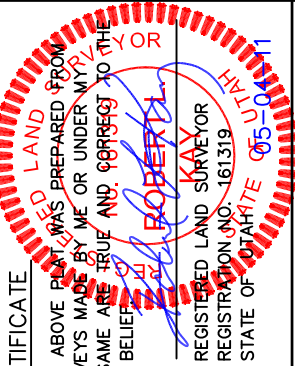


LINE TABLE		
LINE	BEARING	LENGTH
L1	S83°23'12"W	484.49'

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE =	40°10'01.57" (40.167103)	LATITUDE =	40°10'02.13" (40.167258)
LONGITUDE =	110°28'50.42" (110.480672)	LONGITUDE =	110°28'44.23" (110.478953)
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE =	40°10'01.73" (40.167147)	LATITUDE =	40°10'02.28" (40.167300)
LONGITUDE =	110°28'47.86" (110.479961)	LONGITUDE =	110°28'41.67" (110.478242)

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.



CERTIFICATE  
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH  
05-04-11

REVISED: 05-03-11

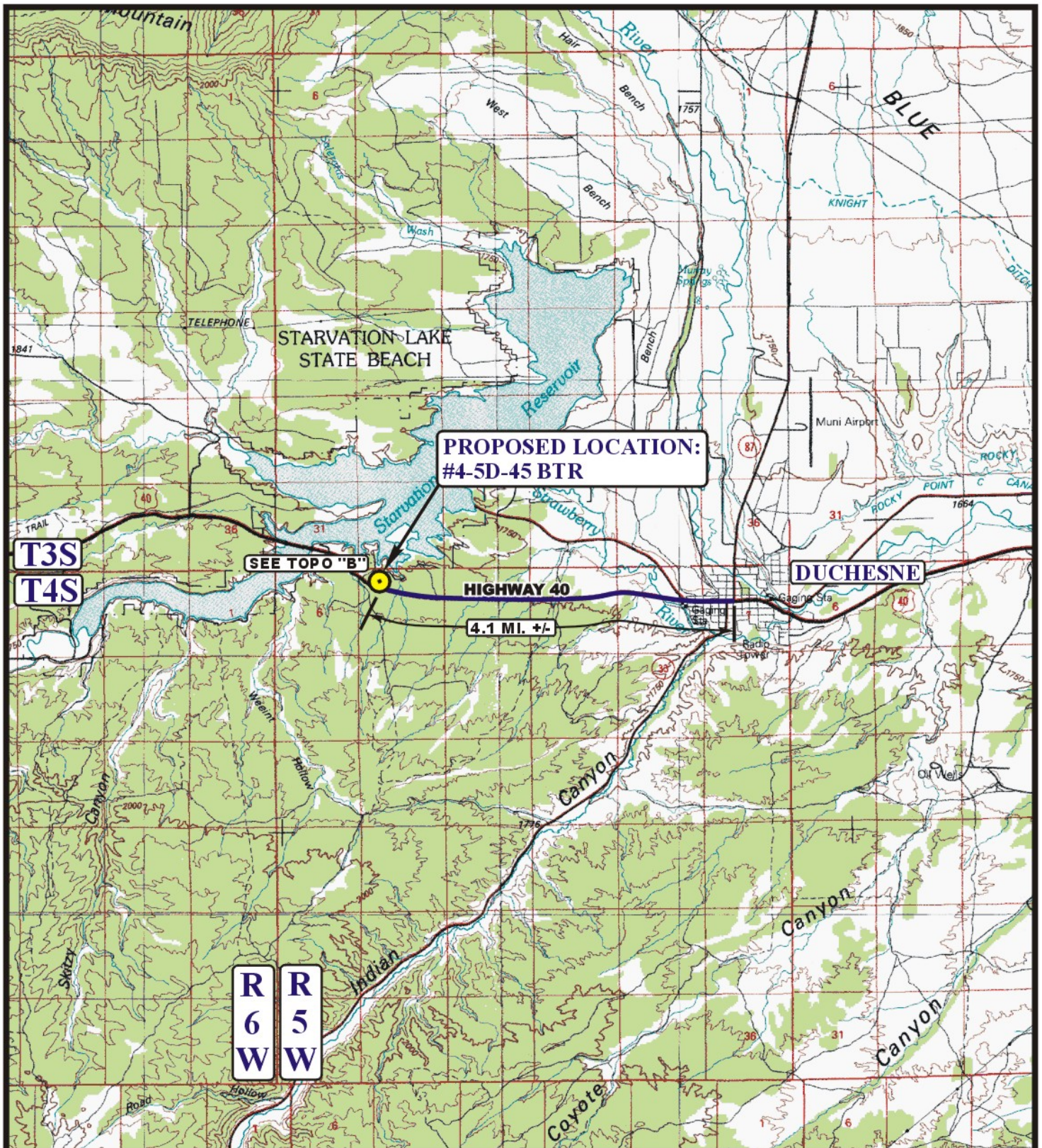
UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 12-09-10	DATE DRAWN: 12-14-10
PARTY T.A. K.N. C.C.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE	
		BILL BARRETT CORPORATION





**LEGEND:**

PROPOSED LOCATION

**BILL BARRETT CORPORATION**

**#4-5D-45 BTR**

**SECTION 5, T4S, R5W, U.S.B.&M.**

**755' FNL 1292' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**ACCESS ROAD  
MAP**

**12 17 10**  
 MONTH DAY YEAR

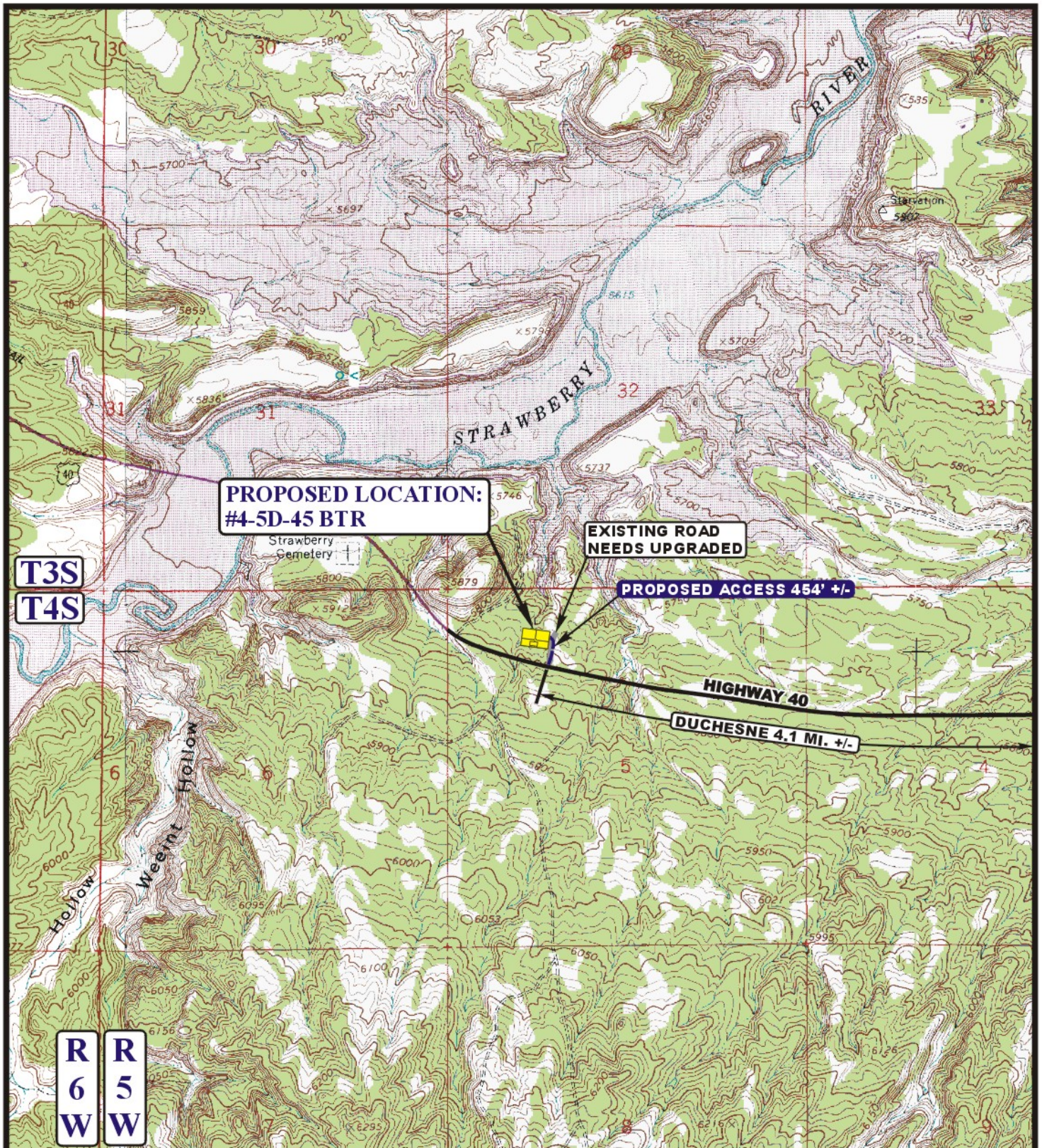
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DRAWN BY: Z.L.

REVISED: 00-00-00







**LEGEND:**

	EXISTING ROAD
	PROPOSED ACCESS ROAD
	EXISTING ROAD NEEDS UPGRADED



**BILL BARRETT CORPORATION**

**#4-5D-45 BTR**  
**SECTION 5, T4S, R5W, U.S.B.&M.**  
**755' FNL 1292' FWL**



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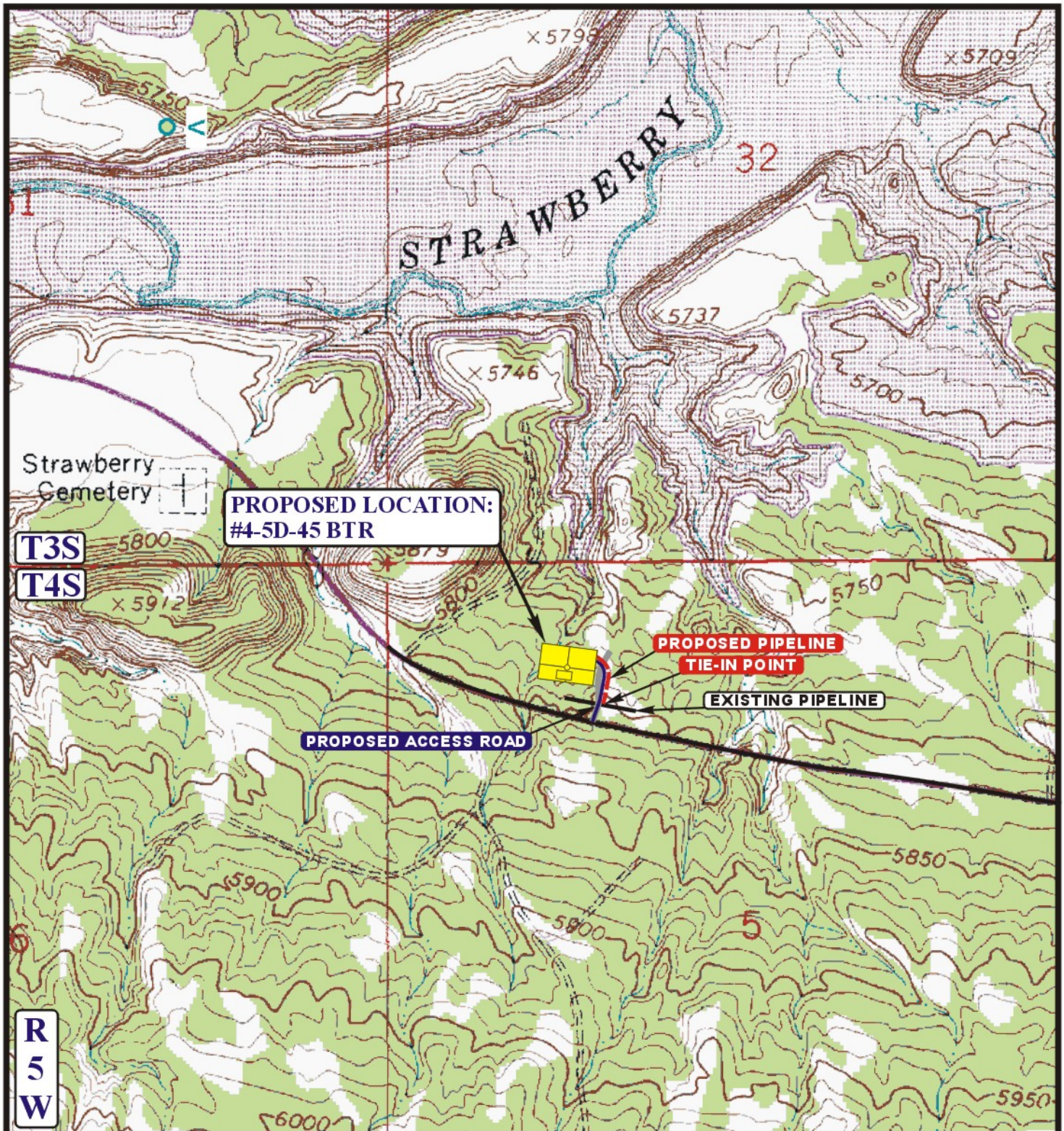
**ACCESS ROAD**  
**MAP**

**12 17 10**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: Z.L. REV: B.D.H. 02-20-12

**B**  
**TOPO**





**APPROXIMATE TOTAL PIPELINE DISTANCE = 361' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE



**BILL BARRETT CORPORATION**

**#4-5D-45 BTR**

**SECTION 5, T4S, R5W, U.S.B.&M.**

**755' FNL 1292' FWL**



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**TOPOGRAPHIC  
MAP**

**12 17 10**  
 MONTH DAY YEAR

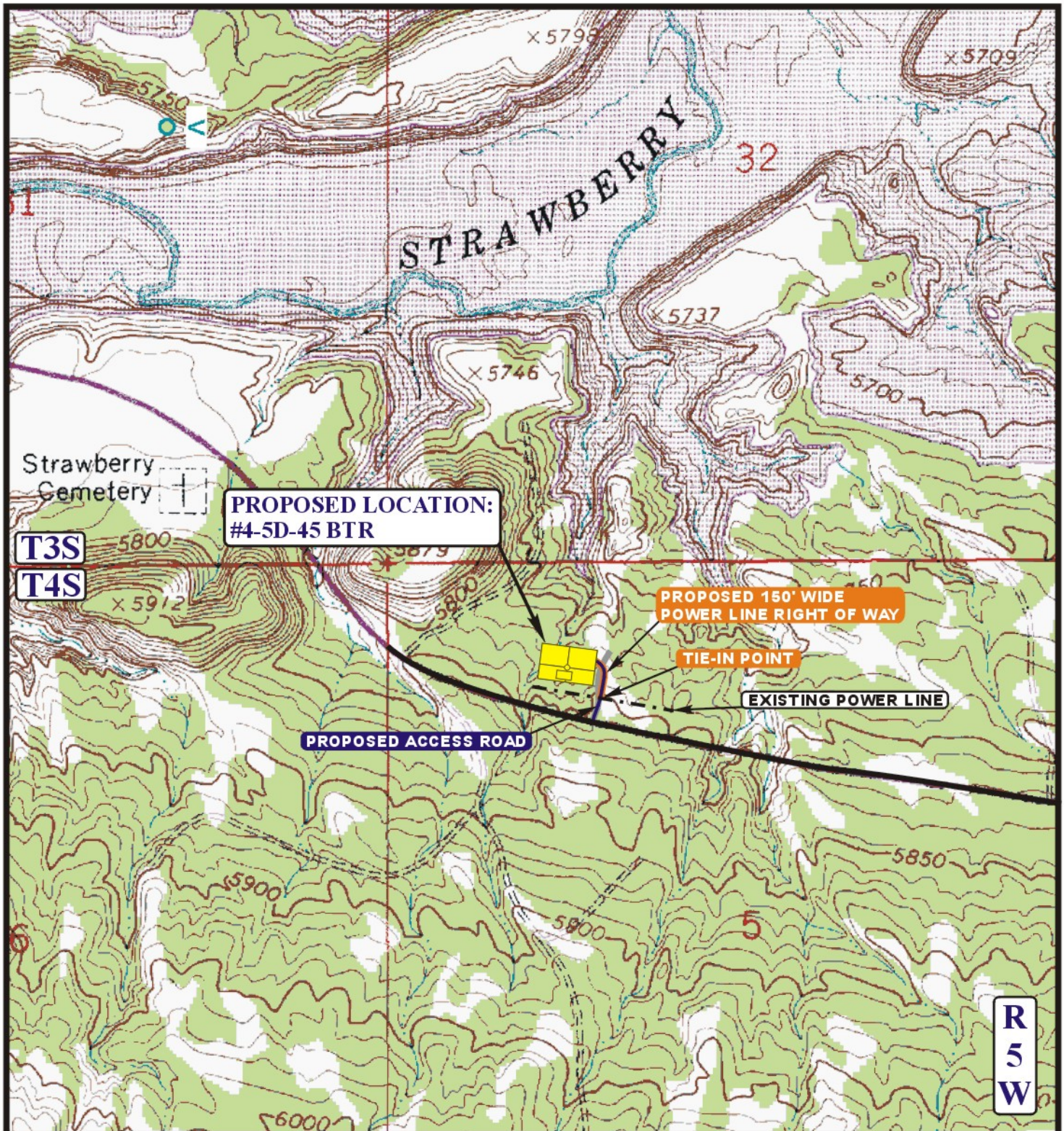
SCALE: 1" = 1000'

DRAWN BY: Z.L.

REV: B.D.H. 02-20-12







**APPROXIMATE TOTAL POWERLINE DISTANCE = 275' +/-**

**LEGEND:**

PROPOSED ACCESS ROAD  
 EXISTING POWERLINE  
 PROPOSED POWER LINE

**BILL BARRETT CORPORATION**

**#4-5D-45 BTR**

**SECTION 5, T4S, R5W, U.S.B.&M.**

**755' FNL 1292' FWL**



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 85 South 200 East Vernal, Utah 84078  
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**TOPOGRAPHIC  
MAP**

**12** MONTH  
**17** DAY  
**10** YEAR

SCALE: 1" = 1000'

DRAWN BY: Z.L.

REV: B.D.H. 02-20-12

**D  
TOPO**





Bill Barrett Corporation

## COMPANY DETAILS: BILL BARRETT CORP

Calculation Method: Minimum Curvature  
 Error System: ISCWSA  
 Scan Method: Closest Approach 3D  
 Error Surface: Elliptical Conic  
 Warning Method: Error Ratio

## SITE DETAILS: 4-5D-45 BTR

## Blacktail Ridge

Site Centre Latitude: 40° 10' 2.280 N  
 Longitude: 110° 28' 41.671 W

Positional Uncertainty: 0.0  
 Convergence: 0.65  
 Local North: True

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
4-5D 3PT MKR	6364.0	-55.7	-480.4	40° 10' 1.7291 N	110° 28' 47.860 W	Rectangle (Sides: L200.0 W200.0)
4-5D PBHL	8814.0	-55.7	-480.4	40° 10' 1.7291 N	110° 28' 47.860 W	Rectangle (Sides: L0.0 W0.0)

## SECTION DETAILS

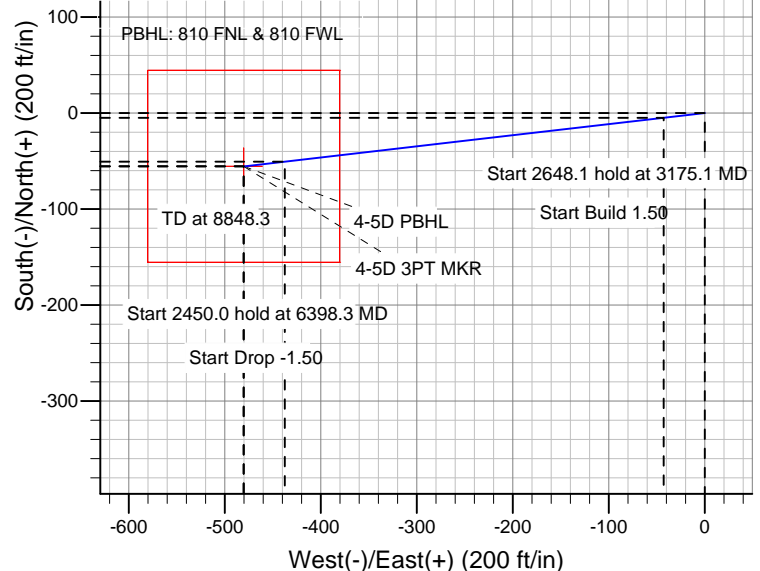
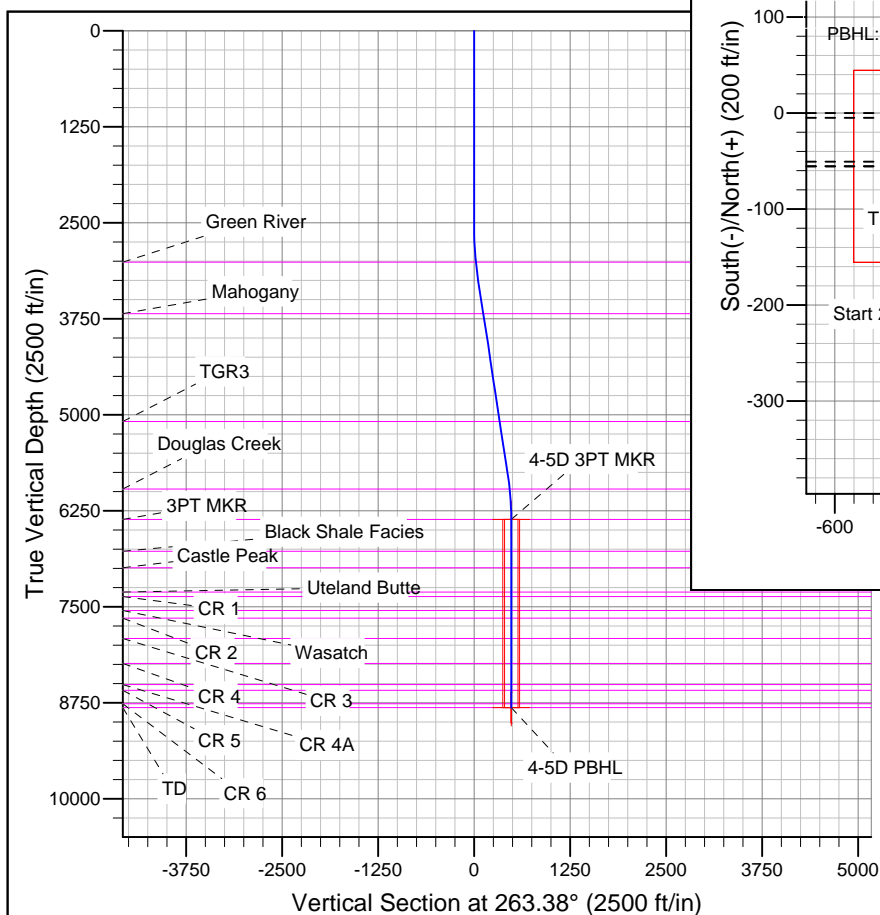
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2600.0	0.00	0.00	2600.0	0.0	0.0	0.00	0.00	0.0	
3	3175.1	8.63	263.38	3172.9	-5.0	-42.9	1.50	263.38	43.2	
4	5823.2	8.63	263.38	5791.1	-50.7	-437.5	0.00	0.00	440.4	
5	6398.3	0.00	0.00	6364.0	-55.7	-480.4	1.50	180.00	483.6	4-5D 3PT MKR
6	8848.3	0.00	0.00	8814.0	-55.7	-480.4	0.00	0.00	483.6	4-5D PBHL

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3014.0	3014.8	Green River
3684.0	3692.0	Mahogany
5089.0	5113.1	TGR3
5969.0	6002.6	Douglas Creek
6364.0	6398.3	3PT MKR
6779.0	6813.3	Black Shale Facies
6994.0	7028.3	Castle Peak
7309.0	7343.3	Uteland Butte
7369.0	7403.3	CR 1
7549.0	7583.3	Wasatch
7649.0	7683.3	CR 2
7914.0	7948.3	CR 3
8239.0	8273.3	CR 4
8514.0	8548.3	CR 4A
8589.0	8623.3	CR 5
8764.0	8798.3	CR 6
8814.0	8848.3	TD

## CASING DETAILS

No casing data is available



Azimuths to True North  
 Magnetic North: 11.44°

Magnetic Field  
 Strength: 52229.0snT  
 Dip Angle: 65.80°  
 Date: 11/30/2011  
 Model: IGRF2010

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 4-5D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Site:</b>	4-5D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	4-5D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	4-5D-45 BTR		
<b>Design:</b>	Design #1		

<b>Project</b>	DUCHESNE COUNTY, UT (NAD 27)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Ground Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Utah Central 4302		

<b>Site</b>	4-5D-45 BTR			
<b>Site Position:</b>		<b>Northing:</b>	669,615.49 ft	<b>Latitude:</b> 40° 10' 2.280 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,285,536.19 ft	<b>Longitude:</b> 110° 28' 41.671 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b> 0.65 °

<b>Well</b>	4-5D-45 BTR			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	669,615.49 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,285,536.19 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	5,782.0 ft

<b>Wellbore</b>	4-5D-45 BTR				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/30/2011	11.44	65.80	52,229

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	263.38

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,175.1	8.63	263.38	3,172.9	-5.0	-42.9	1.50	1.50	0.00	263.38	
5,823.2	8.63	263.38	5,791.1	-50.7	-437.5	0.00	0.00	0.00	0.00	
6,398.3	0.00	0.00	6,364.0	-55.7	-480.4	1.50	-1.50	0.00	180.00	4-5D 3PT MKR
8,848.3	0.00	0.00	8,814.0	-55.7	-480.4	0.00	0.00	0.00	0.00	4-5D PBHL

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 4-5D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Site:</b>	4-5D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	4-5D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	4-5D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	1.50	263.38	2,700.0	-0.2	-1.3	1.3	1.50	1.50	0.00
2,800.0	3.00	263.38	2,799.9	-0.6	-5.2	5.2	1.50	1.50	0.00
2,900.0	4.50	263.38	2,899.7	-1.4	-11.7	11.8	1.50	1.50	0.00
3,000.0	6.00	263.38	2,999.3	-2.4	-20.8	20.9	1.50	1.50	0.00
3,014.8	6.22	263.38	3,014.0	-2.6	-22.4	22.5	1.50	1.50	0.00
<b>Green River</b>									
3,100.0	7.50	263.38	3,098.6	-3.8	-32.5	32.7	1.50	1.50	0.00
3,175.1	8.63	263.38	3,172.9	-5.0	-42.9	43.2	1.50	1.50	0.00
3,200.0	8.63	263.38	3,197.5	-5.4	-46.6	46.9	0.00	0.00	0.00
3,300.0	8.63	263.38	3,296.4	-7.1	-61.5	61.9	0.00	0.00	0.00
3,400.0	8.63	263.38	3,395.3	-8.9	-76.4	76.9	0.00	0.00	0.00
3,500.0	8.63	263.38	3,494.2	-10.6	-91.3	91.9	0.00	0.00	0.00
3,600.0	8.63	263.38	3,593.0	-12.3	-106.2	106.9	0.00	0.00	0.00
3,692.0	8.63	263.38	3,684.0	-13.9	-119.9	120.7	0.00	0.00	0.00
<b>Mahogany</b>									
3,700.0	8.63	263.38	3,691.9	-14.1	-121.1	121.9	0.00	0.00	0.00
3,800.0	8.63	263.38	3,790.8	-15.8	-136.0	136.9	0.00	0.00	0.00
3,900.0	8.63	263.38	3,889.6	-17.5	-150.9	151.9	0.00	0.00	0.00
4,000.0	8.63	263.38	3,988.5	-19.2	-165.8	166.9	0.00	0.00	0.00
4,100.0	8.63	263.38	4,087.4	-21.0	-180.7	181.9	0.00	0.00	0.00
4,200.0	8.63	263.38	4,186.2	-22.7	-195.6	196.9	0.00	0.00	0.00
4,300.0	8.63	263.38	4,285.1	-24.4	-210.5	211.9	0.00	0.00	0.00
4,400.0	8.63	263.38	4,384.0	-26.1	-225.4	226.9	0.00	0.00	0.00
4,500.0	8.63	263.38	4,482.8	-27.9	-240.3	241.9	0.00	0.00	0.00
4,600.0	8.63	263.38	4,581.7	-29.6	-255.2	256.9	0.00	0.00	0.00
4,700.0	8.63	263.38	4,680.6	-31.3	-270.1	271.9	0.00	0.00	0.00
4,800.0	8.63	263.38	4,779.4	-33.1	-285.0	286.9	0.00	0.00	0.00

## Bill Barrett Corp

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 4-5D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Site:</b>	4-5D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	4-5D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	4-5D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,900.0	8.63	263.38	4,878.3	-34.8	-299.9	301.9	0.00	0.00	0.00
5,000.0	8.63	263.38	4,977.2	-36.5	-314.8	316.9	0.00	0.00	0.00
5,100.0	8.63	263.38	5,076.1	-38.2	-329.7	331.9	0.00	0.00	0.00
5,113.1	8.63	263.38	5,089.0	-38.5	-331.7	333.9	0.00	0.00	0.00
<b>TGR3</b>									
5,200.0	8.63	263.38	5,174.9	-40.0	-344.6	346.9	0.00	0.00	0.00
5,300.0	8.63	263.38	5,273.8	-41.7	-359.5	361.9	0.00	0.00	0.00
5,400.0	8.63	263.38	5,372.7	-43.4	-374.4	376.9	0.00	0.00	0.00
5,500.0	8.63	263.38	5,471.5	-45.2	-389.3	391.9	0.00	0.00	0.00
5,600.0	8.63	263.38	5,570.4	-46.9	-404.2	406.9	0.00	0.00	0.00
5,700.0	8.63	263.38	5,669.3	-48.6	-419.1	421.9	0.00	0.00	0.00
5,800.0	8.63	263.38	5,768.1	-50.3	-434.0	436.9	0.00	0.00	0.00
5,823.2	8.63	263.38	5,791.1	-50.7	-437.5	440.4	0.00	0.00	0.00
5,900.0	7.47	263.38	5,867.1	-52.0	-448.2	451.2	1.50	-1.50	0.00
6,000.0	5.97	263.38	5,966.4	-53.3	-459.8	462.9	1.50	-1.50	0.00
6,002.6	5.94	263.38	5,969.0	-53.4	-460.1	463.1	1.50	-1.50	0.00
<b>Douglas Creek</b>									
6,100.0	4.47	263.38	6,066.0	-54.4	-468.8	472.0	1.50	-1.50	0.00
6,200.0	2.97	263.38	6,165.8	-55.1	-475.3	478.5	1.50	-1.50	0.00
6,300.0	1.47	263.38	6,265.7	-55.6	-479.1	482.4	1.50	-1.50	0.00
6,398.3	0.00	0.00	6,364.0	-55.7	-480.4	483.6	1.50	-1.50	0.00
<b>3PT MKR - 4-5D 3PT MKR</b>									
6,400.0	0.00	0.00	6,365.7	-55.7	-480.4	483.6	0.00	0.00	0.00
6,500.0	0.00	0.00	6,465.7	-55.7	-480.4	483.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,565.7	-55.7	-480.4	483.6	0.00	0.00	0.00
6,700.0	0.00	0.00	6,665.7	-55.7	-480.4	483.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,765.7	-55.7	-480.4	483.6	0.00	0.00	0.00
6,813.3	0.00	0.00	6,779.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>Black Shale Facies</b>									
6,900.0	0.00	0.00	6,865.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,965.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,028.3	0.00	0.00	6,994.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>Castle Peak</b>									
7,100.0	0.00	0.00	7,065.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,165.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,300.0	0.00	0.00	7,265.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,343.3	0.00	0.00	7,309.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>Uteland Butte</b>									
7,400.0	0.00	0.00	7,365.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,403.3	0.00	0.00	7,369.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 1</b>									
7,500.0	0.00	0.00	7,465.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,583.3	0.00	0.00	7,549.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>Wasatch</b>									
7,600.0	0.00	0.00	7,565.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,683.3	0.00	0.00	7,649.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 2</b>									
7,700.0	0.00	0.00	7,665.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,800.0	0.00	0.00	7,765.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,865.7	-55.7	-480.4	483.6	0.00	0.00	0.00
7,948.3	0.00	0.00	7,914.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 3</b>									
8,000.0	0.00	0.00	7,965.7	-55.7	-480.4	483.6	0.00	0.00	0.00

**Bill Barrett Corp**

## Planning Report

<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well 4-5D-45 BTR
<b>Company:</b>	BILL BARRETT CORP	<b>TVD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Project:</b>	DUCHESNE COUNTY, UT (NAD 27)	<b>MD Reference:</b>	KB @ 5797.0ft (Original Well Elev)
<b>Site:</b>	4-5D-45 BTR	<b>North Reference:</b>	True
<b>Well:</b>	4-5D-45 BTR	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	4-5D-45 BTR		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,100.0	0.00	0.00	8,065.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,165.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,273.3	0.00	0.00	8,239.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 4</b>									
8,300.0	0.00	0.00	8,265.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,365.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,465.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,548.3	0.00	0.00	8,514.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 4A</b>									
8,600.0	0.00	0.00	8,565.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,623.3	0.00	0.00	8,589.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 5</b>									
8,700.0	0.00	0.00	8,665.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,798.3	0.00	0.00	8,764.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>CR 6</b>									
8,800.0	0.00	0.00	8,765.7	-55.7	-480.4	483.6	0.00	0.00	0.00
8,848.3	0.00	0.00	8,814.0	-55.7	-480.4	483.6	0.00	0.00	0.00
<b>TD - 4-5D PBHL</b>									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,014.8	3,014.0	Green River		0.00		
3,692.0	3,684.0	Mahogany		0.00		
5,113.1	5,089.0	TGR3		0.00		
6,002.6	5,969.0	Douglas Creek		0.00		
6,398.3	6,364.0	3PT MKR		0.00		
6,813.3	6,779.0	Black Shale Facies		0.00		
7,028.3	6,994.0	Castle Peak		0.00		
7,343.3	7,309.0	Uteland Butte		0.00		
7,403.3	7,369.0	CR 1		0.00		
7,583.3	7,549.0	Wasatch		0.00		
7,683.3	7,649.0	CR 2		0.00		
7,948.3	7,914.0	CR 3		0.00		
8,273.3	8,239.0	CR 4		0.00		
8,548.3	8,514.0	CR 4A		0.00		
8,623.3	8,589.0	CR 5		0.00		
8,798.3	8,764.0	CR 6		0.00		
8,848.3	8,814.0	TD		0.00		

## **SURFACE USE PLAN**

BILL BARRETT CORPORATION

### **4-5D-45 BTR Well Pad**

Lot 4 (NW NW), 755' FNL and 1292' FWL, Section 5, T4S-R5W, USB&M (surface hole)

Lot 4 (NW NW), 810' FNL and 810' FWL, Section 5, T4S-R5W, USB&M (bottom hole)

Duchesne County, Utah

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The onsite inspection for this pad occurred on August 18, 2011. Site specific conditions or changes as a result of that onsite are indicated below. Plat changes requested at the onsite are reflected within this APD.

- a) BBC committed to closed-loop drilling because of close proximity to Starvation Reservoir;
- b) Initial site moved to the current site to avoid cultural resources;

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

1. **Existing Roads:**

- a. The proposed well site is located approximately 4.2 miles west of Duchesne, Utah. Maps and directions reflecting the route to the proposed well site are included (see Topographic maps A and B).
- b. The existing State Highway 40 would be utilized from Duchesne for 4.1 miles to an existing approach that provides access to the planned new access road.
- c. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a motor grader and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.
- d. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.
- e. The use of roads under State and Duchesne County Road Department maintenance are necessary to access the project area with no improvements proposed. A Utah Department of Transportation road encroachment is required for this project and is submitted and pending approval at this time.
- f. All existing roads would be maintained and kept in good repair during all phases of operation.



Bill Barrett Corporation  
Surface Use Plan  
#4-5D-45 BTR  
Duchesne County, UT

2. Planned Access Road:

- a. Approximately 454 feet of new access road trending north is planned from Highway 40 (see Topographic Map B). The access road crosses entirely Ute Tribe surface.
- b. The planned access road would be constructed to a 30-foot ROW width with an 18-foot travel surface. See section 12.d. below for disturbance estimates.
- c. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.
- d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.
- e. A maximum grade of 10% would be maintained throughout the project with minimum cuts and fills, as necessary, to access the well.
- f. Excess rock from construction of the pad may be used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.
- g. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.
- h. Turnouts are not proposed.
- i. No culverts or low-water crossings are anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.

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Surface Use Plan  
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- j. One cattleguard/cow gate combination at the UDOT right-of-way fence is anticipated at this time.
- k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic.
- l. All access roads and surface disturbing activities would conform to the appropriate standard, **no higher than necessary**, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition – Revised 2007.
- m. The operator would be responsible for all maintenance needs of the new access road.

3. Location of Existing Wells (see One-Mile Radius Map):

- a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:
  - i. water wells none
  - ii. injection wells none
  - iii. disposal wells none
  - iv. drilling wells none
  - v. temp shut-in wells none
  - vi. producing wells four
  - vii. abandoned wells one

4. Location of Production Facilities

- a. Surface facilities would consist of a wellhead, separator, gas meter, combustor, (1) 500 gal methanol tank, (1) 500 glycol tank, (3) 500 bbl oil tanks, (1) 500 bbl water tank, (1) 500 bbl test tank, (1) 1000 gal propane tank, a pumping unit or Roto-flex unit or ESP or gas lift unit, electrical or with a natural gas or diesel fired motor, solar panels, solar chemical and methanol pumps and one trace pump. See attached proposed facility diagram.
- b. Most wells would be fitted with a pump jack or Roto-flex unit or ESP or gas lift to assist liquid production. The prime mover for pump jacks or Roto-flex units would be small (100 horsepower or less), electric motor or natural gas or diesel fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 25 ft pad and the prime mover would be a natural gas-fired internal combustion engine rated at 200 horsepower or less or an electric compressor of similar horsepower powered by electricity.

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- c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the tank battery or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil.
- d. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.
- e. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.
- f. Approximately 361 feet of pipeline corridor (see Topographic Map C) containing up to three lines (one gas pipeline up to 8 inch in diameter, one water line up to 4 inch in diameter and one residue line up to 4 inch in diameter) is proposed trending south to the existing BTR pipeline corridor. Pipelines would be constructed of steel, polyethylene or fiberglass and would connect to the proposed pipeline servicing nearby BBC wells. The pipeline crosses entirely Ute Tribe surface.
- g. The new segment of gas pipeline would be surface laid within a 30 foot wide pipeline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.
- h. Construction of the ROW would temporarily utilize the 30 foot disturbed width for the road for a total disturbed width of 60 foot for the road and pipeline corridors. The use of the proposed well site and access roads would facilitate the staging of the pipeline construction.
- i. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.
- j. All permanent above-ground structures would be painted a flat, non-reflective Beetle Green color, to match the standard environmental colors. All facilities would be painted the designated color at the time of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

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- k. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any modifications to proposed facilities would be reflected in the site security diagram submitted.
- l. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

- a. Water for the drilling and completion would be trucked from any of the following locations:

Water Right No. and Application or Change No.	Applicant	Allocation	Date	Point of Diversion	Source
43-180	Duchesne City Water Service District	5 cfs	8/13/2004	Knight Diversion Dam	Duchesne River
43-1202, Change a13837	Myton City	5.49 cfr and 3967 acre feet	3/21/1986	Knight Diversion Dam	Duchesne River
43-10444, Appln A57477	Duchesne County Upper Country Water	2 cfs	1994	Ditch at Source	Cow Canyon Spring
43-10446, Appln F57432	Duchesne County Upper Country Water	1.58 cfs	1994	Ditch at Source	Cow Canyon Spring
43-1273, Appln A17462	J.J.N.P. Company	7 cfs	1946	Strawberry River	Strawberry River
43-1273, Appln t36590	J.J.N.P. Company	4 cfs	6/03/2010	Strawberry River	Strawberry River
43-2505, Appln t37379	McKinnon Ranch Properties, LC	1.3 cfs	4/28/2011	Pumped from Sec, 17, T4SR6W	Water Canyon Lake
43-12415, Change A17215a	Peatross Ranch, LLC	1.89 cfs	09/2011	Dugout Pond	Strawberry River

- b. No new water well is proposed with this application.
- c. Should additional water sources be pursued they would be properly permitted through the State of Utah – Division of Water Rights.
- d. Water use would vary in accordance with the formations to be drilled but would be up to approximately 5.41 acre feet for drilling and completion operations.

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6. Source of Construction Material:

- a. The use of materials would conform to 43 CFR 3610.2-3.
- b. No construction materials would be removed from the lease or EDA area.
- c. If any additional gravel is required, it would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

- a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.
- b. This location will be drilled with a closed loop system. There will be a cuttings storage area instead of a reserve pit.
- c. The cuttings storage area would be lined with 20 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit.
- d. To deter livestock from entering the cuttings storage area, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.
- e. Drill cuttings would be stored in the cuttings storage area and either hauled to an approved disposal facility or will be buried on-site.
- f. Produced fluids from the well other than water would be decanted into steel test tank(s) until such time as construction of production facilities is completed. Any oil that may be accumulated would be transferred to a permanent production tank. Produced water may be used in further drilling and completion activities, evaporated in the pit, or would be hauled to one of the state-approved disposal facilities below:

<b>Disposal Facilities</b>
1. RNI Industries, Inc. – Pleasant Valley Disposal Pits, Sec. 25, 26, 35 & 36, T4S-R3W
2. Pro Water LLC – Blue Bench 13-1 Disposal Well (43-013-30971) NENE, Sec. 13, T3S-R5W
3. RN Industries, Inc. – Bluebell Disposal Ponds, Sec. 2, 4 & 9, T2S-R2W
4. Water Disposal, Inc. – Harmston 1-32-A1 Disposal Well (43-013-30224), UTR #00707, Sec. 32, T1S-R1W

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<b>Disposal Facilities</b>
5. Unified Water Pits – Sec. 31, T2S-R4W
6. Iowa Tank Line Pits – 8500 BLM Fence Road, Pleasant Valley

- g. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.
- h. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site, most likely in Duchesne, Utah.
- i. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use diesel fuel, sand (silica), hydrochloric acid, and CO<sub>2</sub> gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.
- j. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities in Duchesne, and/or Uintah Counties, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.
- k. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.
- l. A flare pit may be constructed a minimum of 110 feet from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels,

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separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project Area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is feasible. At which point the fluid would either be returned to the pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.

- m. Hydrocarbons would be removed from the cuttings storage area would as soon as practical. In the event immediate removal is not practical, the storage area would be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

8. Ancillary Facilities:

- a. Garbage containers and portable toilets would be located on the well pad.
- b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. The well pad could include up to five single wide mobile homes or fifth wheel campers/trailers.
- c. A surface powerline corridor 275 feet in length is proposed for installation by third-party installer within a 150 foot wide powerline corridor adjacent to the proposed access road. See 12.d below for disturbance estimates.

9. Well Site Layout:

- a. The well would be properly identified in accordance with 43 CFR 3162.6.
- b. The pad layout, cross section diagrams and rig layout are enclosed (see Figures 1 and 2).
- c. The pad and road designs are consistent with industry specifications.
- d. The pad has been staked at its maximum size of 400 feet x 255 feet with a cuttings storage area size of 60 feet x 110 feet. See section 12.d below for disturbance estimates.
- e. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.
- f. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.



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- g. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.
- h. All cut and fill slopes would be such that stability can be maintained for the life of the activity.
- i. Diversion ditches would be constructed, if necessary, around the well site to prevent surface waters from entering the well site area.
- j. Water application may be implemented if necessary to minimize the amount of fugitive dust.
- k. All surface disturbing activities would be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

10. Plan for Restoration of the Surface:

- a. A site specific reclamation plan would be submitted, if requested, within 90 days of location construction to the surface managing agency.
- b. Site reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.
- c. The operator would control noxious weeds along access road use authorizations and well site by spraying or mechanical removal, according to the Utah Noxious Weed Act and as set forth in the approved surface damage agreements.
- d. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The cuttings storage area would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the storage area until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.
- e. The cuttings storage area and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable stabilization. Back slopes and fore slopes would be



Bill Barrett Corporation  
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reduced as practical and scarified with the contour. The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the Ute Tribe specified seed mix.

- f. Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the Ute Tribe prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

11. Surface and Mineral Ownership:

- a. Surface ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.
- b. Mineral ownership – Ute Indian Tribe - 988 South 7500 East; Ft. Duchesne, Utah 84026; 435-725-4982.

12. Other Information:

- a. Montgomery Archeological Consultants has conducted a Class III archeological survey. A copy of the report has been submitted under separate cover to the appropriate agencies by Montgomery as MOAC Report No. 10-210- dated October 25, 2010.
- b. BBC would require that their personnel, contractors, and subcontractors to comply with Federal regulations intended to protect archeological and cultural resources.
- c. Project personnel and contractors would be educated on and subject to the following requirements:
  - No dogs or firearms within the Project Area.
  - No littering within the Project Area.
  - Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders.
  - Campfires or uncontained fires of any kind would be prohibited.
  - Portable generators used in the Project Area would have spark arrestors.

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d. Disturbance estimates:

**Approximate Acreage Disturbances**

Well Pad		3.239	acres
Access	454 feet	0.313	acres
Pipeline	361 feet	0.946	acres
Powerline	275 feet	0.248	acres
<b>Total</b>		<b>4.746</b>	<b>acres</b>

Bill Barrett Corporation  
Surface Use Plan  
#4-5D-45 BTR  
Duchesne County, UT

OPERATOR CERTIFICATION

Certification:

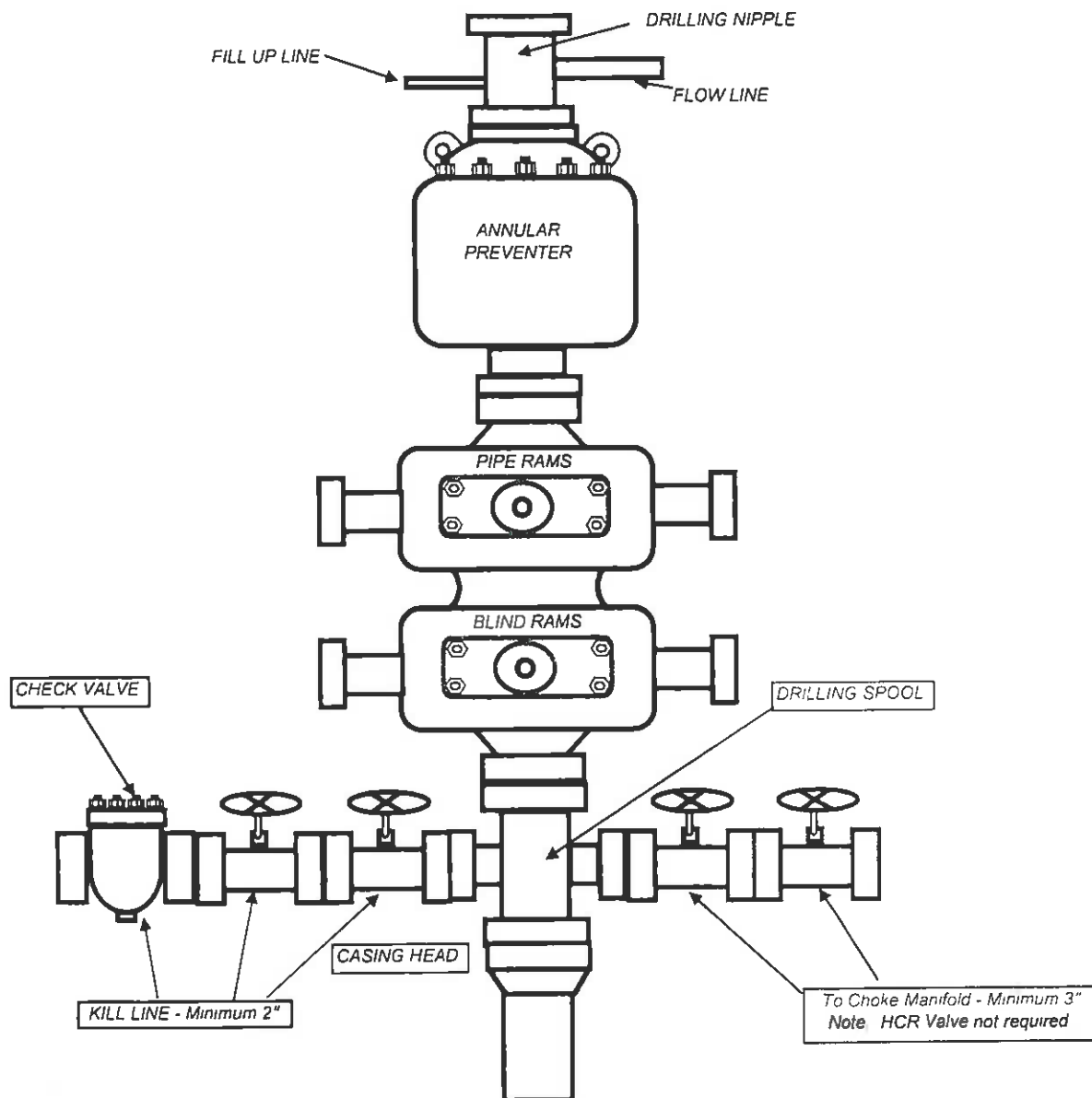
I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application and that bond coverage is provided under Bill Barrett Corporations federal nationwide bond. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this 21<sup>st</sup> day of February 2012  
Name: Venessa Langmacher  
Position Title: Senior Permit Analyst  
Address: 1099 18<sup>th</sup> Street, Suite 2300, Denver, CO 80202  
Telephone: 303-312-8172  
E-mail: vlangmacher@billbarrettcorp.com  
Field Representative Kary Eldredge / Bill Barrett Corporation  
Address: 1820 W. Highway 40, Roosevelt, UT 84066  
Telephone: 435-725-3515 (office); 435-724-6789 (mobile)  
E-mail: keldredge@billbarrettcorp.com

  
\_\_\_\_\_  
Venessa Langmacher, Senior Permit Analyst

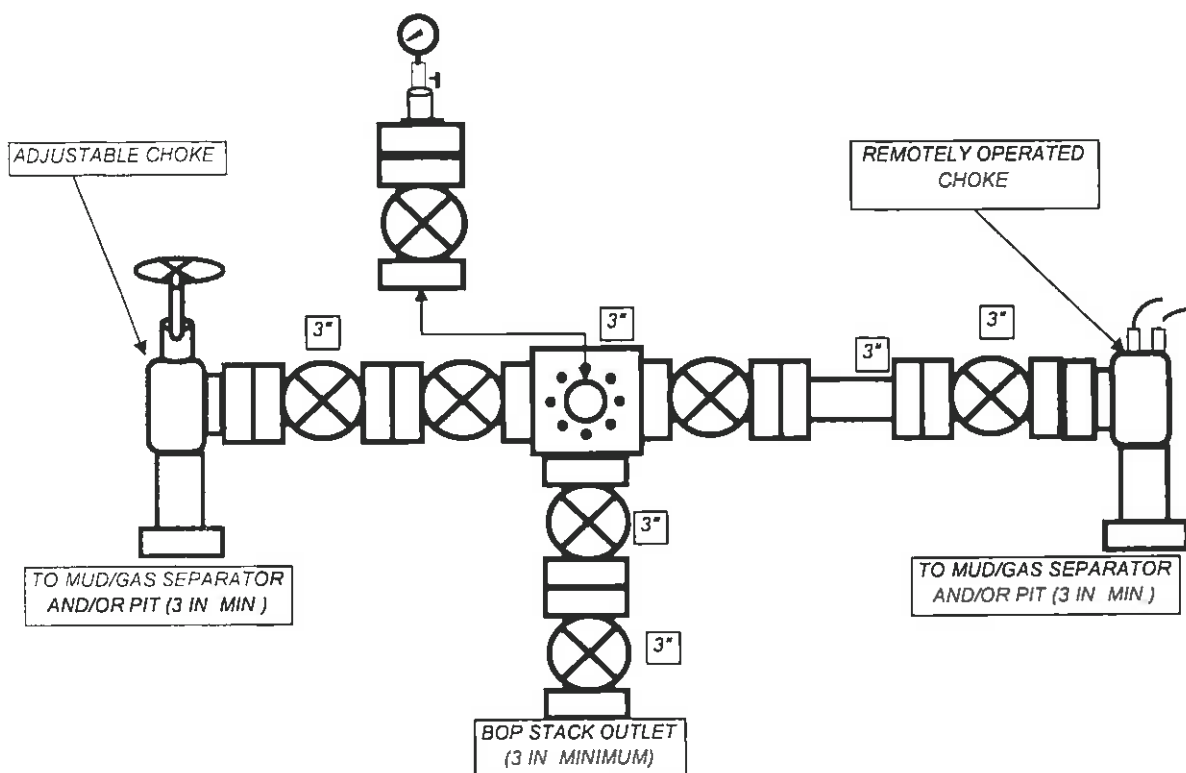
## BILL BARRETT CORPORATION

### TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER



# BILL BARRETT CORPORATION

## TYPICAL 5,000 p.s.i. CHOKE MANIFOLD





February 21, 2012

Ms. Diana Mason – Petroleum Technician  
State of Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P. O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11  
**Blacktail Ridge Area #4-5D-45 BTR Well**  
Surface: 755' FNL & 1,292' FWL, NWNW, Lot 4 of 5-T4S-R5W, USM  
Bottom Hole: 810' FNL & 810' FWL, NWNW, Lot 4 of 5-T4S-R5W, USM  
Duchesne County, Utah

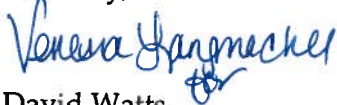
Dear Ms. Mason,

Pursuant to the filing of Bill Barrett Corporation's ("BBC") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rules R649-2, R649-3, R649-10 and R649-11, pertaining to the Location and Siting of Wells.

- The proposed location is within our Blacktail Ridge Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area.
- The well will be drilled under an Exploration and Development Agreement between the Ute Indian Tribe and Ute Distribution Corporation. Ute Energy, LLC owns a right to participate in this well.
- BBC certifies that it is the working interest owner of all lands within 460 feet of the proposed well location, and together with Ute Energy, LLC, we own 100% of the working interest in these lands.

Based on the information provided, BBC requests that the permit be granted pursuant to R649-3-11. Should you have any questions or need further information, please contact me at 303-312-8544.

Sincerely,



David Watts  
Landman

1099 18<sup>TH</sup> STREET  
SUITE 2300  
DENVER, CO 80202  
P 303.293.9100  
F 303.291.0420



## BILL BARRETT CORPORATION

## TYPICAL CROSS SECTIONS FOR

#4-5D-45 BTR

SECTION 5, T4S, R5W, U.S.B.&amp;M.

755' FNL 1292' FWL

FIGURE #2

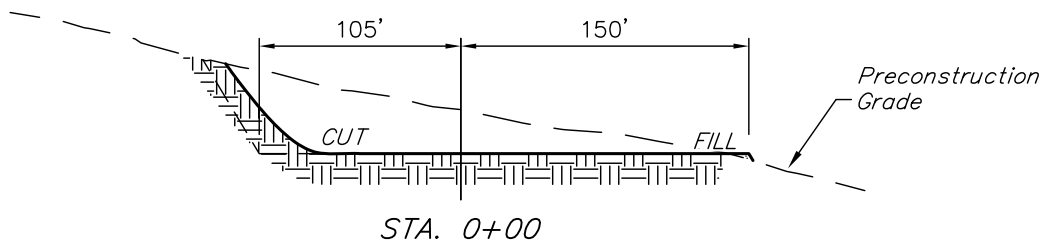
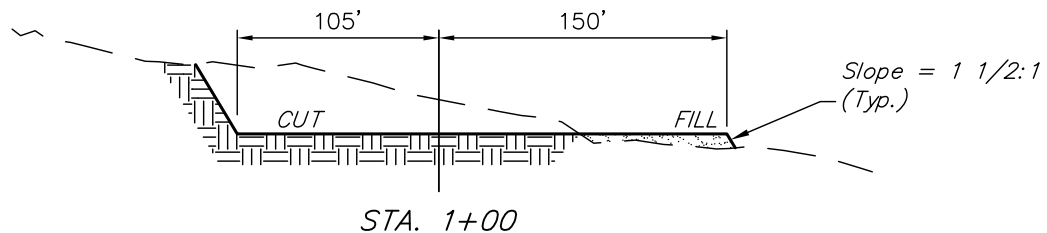
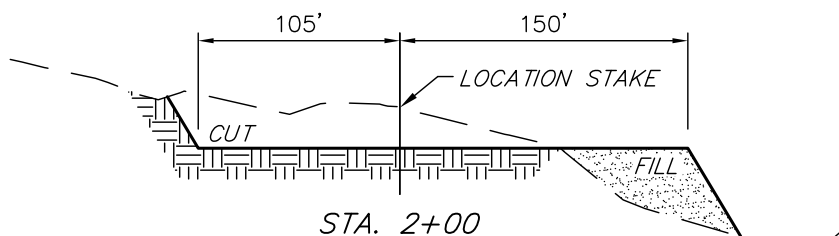
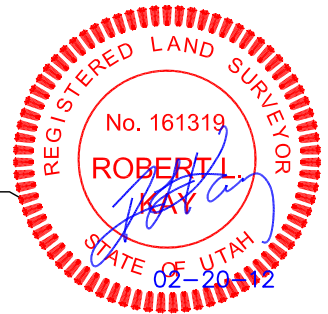
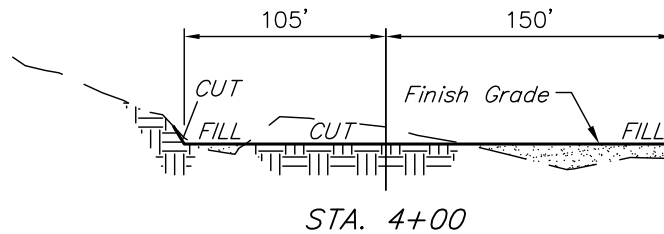
1" = 40'  
X-Section  
Scale  
1" = 100'

DATE: 12-14-10

DRAWN BY: C.C.

REVISED: 02-06-12 B.L.B.

REVISED: 02-20-12 B.L.B.



## NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

(12") Topsoil Stripping = 4,530 Cu. Yds.  
Remaining Location = 14,660 Cu. Yds.  
TOTAL CUT = 19,190 CU.YDS.  
FILL = 14,660 CU.YDS.

EXCESS MATERIAL = 4,530 Cu. Yds.  
Topsoil = 4,530 Cu. Yds.  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: February 21, 2012



## BILL BARRETT CORPORATION

## TYPICAL RIG LAYOUT FOR

#4-5D-45 BTR

SECTION 5, T4S, R5W, U.S.B.&amp;M.

755' FNL 1292' FWL



FIGURE #3

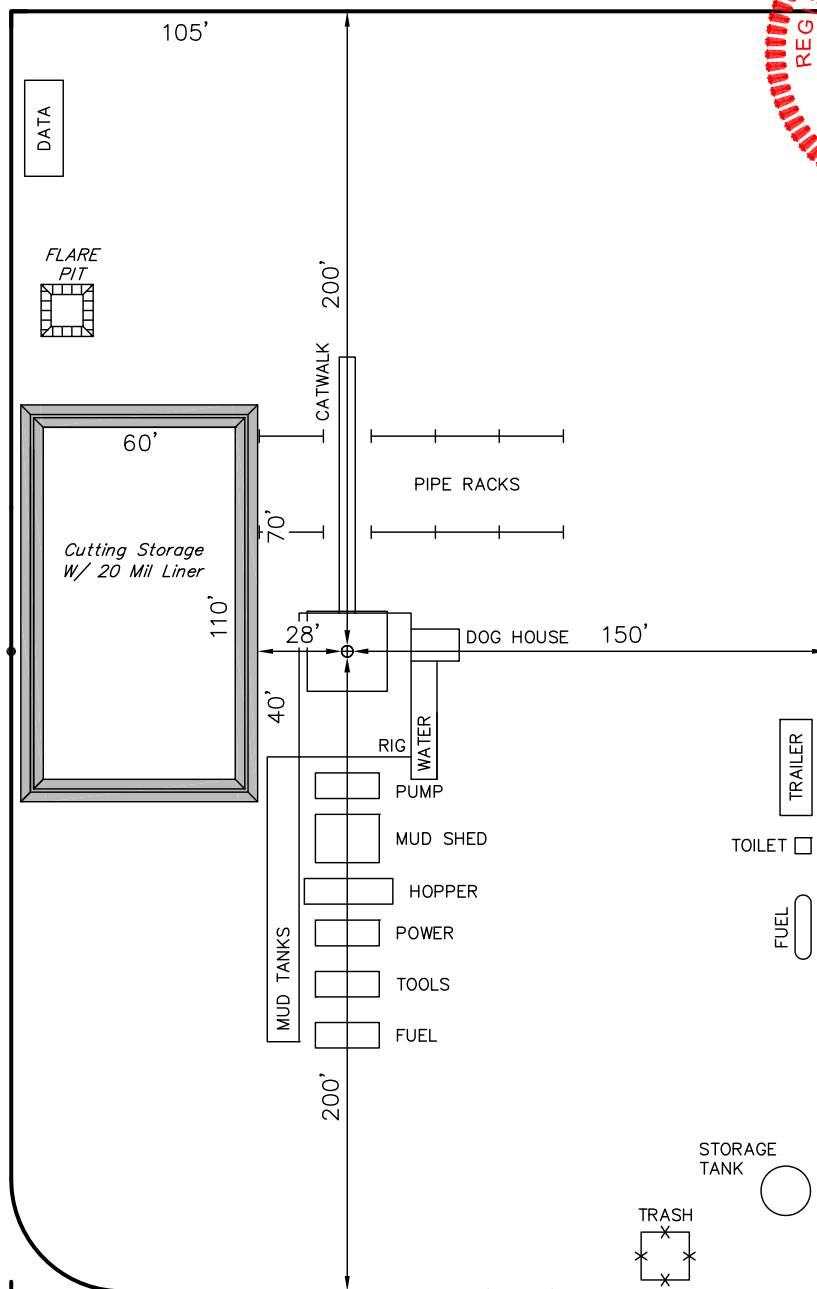
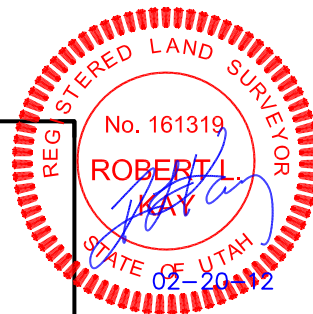
SCALE: 1" = 60'

DATE: 12-14-10

DRAWN BY: C.C.

REVISED: 02-06-12 B.L.B.

REVISED: 02-20-12 B.L.B.



Existing Road

Proposed Access Road

UINTAH ENGINEERING &amp; LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: February 21, 2012

**BILL BARRETT CORPORATION****INTERIM RECLAMATION PLAN FOR**

#4-5D-45 BTR

SECTION 5, T4S, R5W, U.S.B.&amp;M.

755' FNL 1292' FWL

**FIGURE #4**

SCALE: 1" = 60'

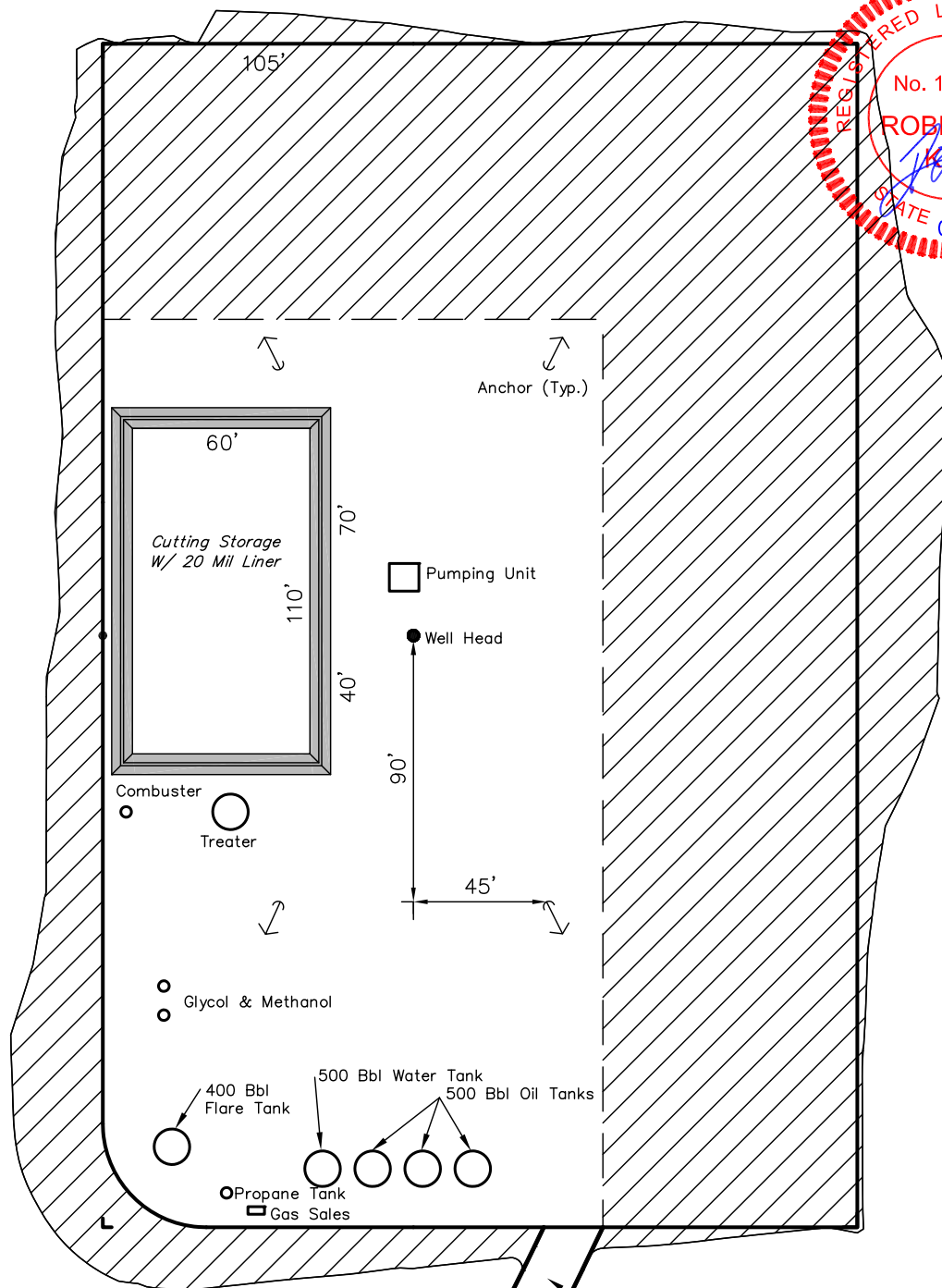
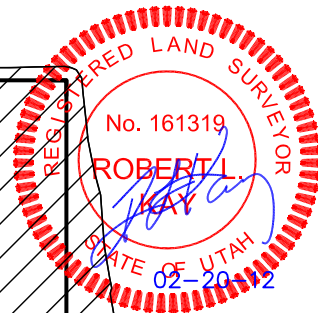
DATE: 07-18-11

DRAWN BY: S.B.

REV: 07-26-11

REVISED: 02-06-12 B.L.B.

REVISED: 02-20-12 B.L.B.



Existing Road

Access Road

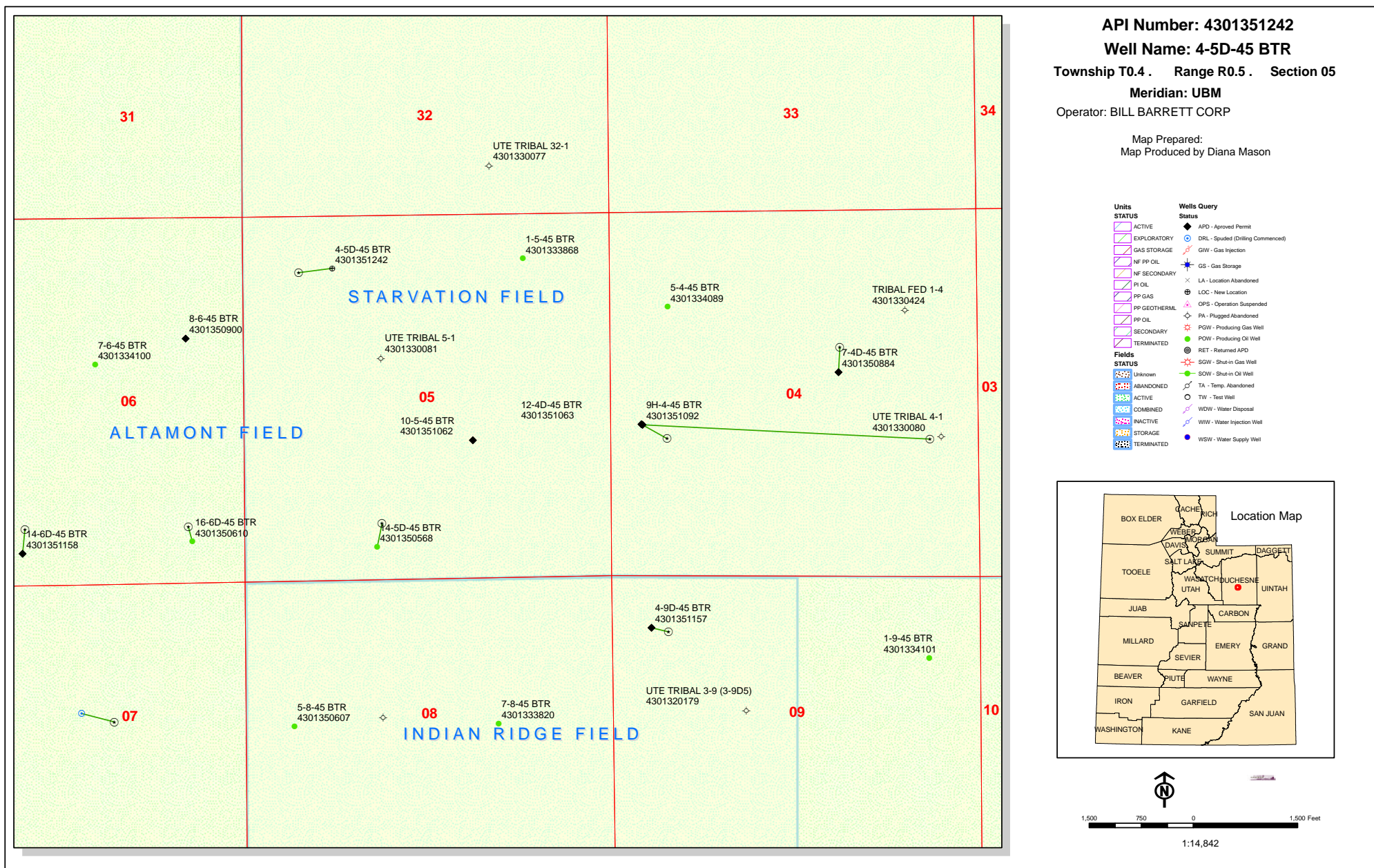
APPROXIMATE ACREAGES  
UN-RECLAIMED = ± 1.185 ACRES

INTERIM RECLAMATION

**UINTAH ENGINEERING & LAND SURVEYING**

85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

**RECEIVED:** February 21, 2012



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/21/2012

API NO. ASSIGNED: 43013512420000

WELL NAME: 4-5D-45 BTR

OPERATOR: BILL BARRETT CORP (N2165)

PHONE NUMBER: 303 312-8172

CONTACT: Venessa Langmacher

PROPOSED LOCATION: NWNW 05 040S 050W

Permit Tech Review: ☒

SURFACE: 0755 FNL 1292 FWL

Engineering Review: ☐

BOTTOM: 0810 FNL 0810 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.16710

LONGITUDE: -110.47910

UTM SURF EASTINGS: 544355.00

NORTHINGS: 4446434.00

FIELD NAME: ALTAMONT

LEASE TYPE: 2 - Indian

LEASE NUMBER: 1420H626261

PROPOSED PRODUCING FORMATION(S): GREEN RIVER-WASATCH

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

## LOCATION AND SITING:

☒ PLAT☐ R649-2-3.☒ Bond: INDIAN - LPM8874725

Unit:

☐ Potash☐ R649-3-2. General☐ Oil Shale 190-5☐ Oil Shale 190-3☐ R649-3-3. Exception☐ Oil Shale 190-13☒ Drilling Unit☒ Water Permit: 43-180

Board Cause No: Cause 139-85

☐ RDCC Review:

Effective Date: 3/11/2010

☐ Fee Surface Agreement

Siting: 4 Prod LGRRV-WSTC Per Sectional Drilling Units

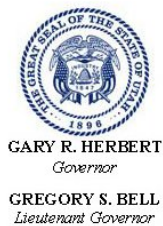
☐ Intent to Commingle☒ R649-3-11. Directional Drill

Commingle Approved

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason  
15 - Directional - dmason

RECEIVED: March 01, 2012



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** 4-5D-45 BTR  
**API Well Number:** 43013512420000  
**Lease Number:** 1420H626261  
**Surface Owner:** INDIAN  
**Approval Date:** 3/1/2012

**Issued to:**

BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

**Authority:**

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-85. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas

API Well No: 43013512420000

website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas





**GARY R. HERBERT**  
Governor

**GREG BELL**  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

**MICHAEL R. STYLER**  
Executive Director

### Division of Oil, Gas and Mining

**JOHN R. BAZA**  
Division Director

February 21, 2012

## Notice to Oil and Gas Operators

Re: Hydraulic Fracturing/FracFocus.org

Although the process of hydraulic fracturing has been a commonly used method for obtaining production from oil and gas wells for many years in Utah and worldwide, this process has become an increasingly controversial issue with the public. Currently there are no conclusive studies that show examples of ground water contamination or public health issues resulting from hydraulic fracturing. However, there is still a great amount of public debate concerning the subject. The Division of Oil, Gas and Mining believes that in order to address some of the public anxiety concerning the process of hydraulic fracturing, it would be beneficial to the petroleum industry in Utah to voluntarily report the chemical content of hydraulic fracturing fluids to the website FracFocus (<http://fracfocus.org>).

FracFocus is the national hydraulic fracturing chemical registry website. This website is a joint project of the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. The website is both educational and informative and an excellent resource for those seeking information on hydraulic fracturing.

After a hydraulic fracture stimulation is performed, the Division would ask the operator to post on the FracFocus Chemical Disclosure Registry the following stimulation detail:

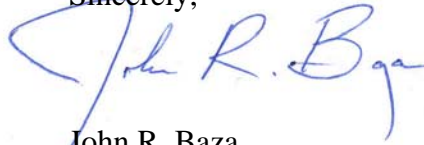
Fracture date, state, county, API number, operator name, well name, location, production type, true vertical depth, total water volume, and hydraulic fracturing fluid composition as follows:

- (1) Trade name
- (2) Supplier
- (3) Purpose
- (4) Ingredients
- (5) Chemical abstract number
- (6) Maximum ingredient concentration in additive
- (7) Maximum ingredient concentration in hydraulic fracturing fluid



On this website, the public can search for information about the chemicals used in the hydraulic fracturing of oil and gas wells by specific well and location. If you are not familiar with the FracFocus website, the Division encourages you to visit the website to acquaint yourself with the information that is being reported. Other oil and gas producing states have made similar requests or established regulatory requirements concerning hydraulic fracturing and the use of the FracFocus website. The Division strongly believes that through the openness of this request that it will promote the public's trust of the petroleum industry. This will continue to enhance a strong community support for the development of oil and gas, educate the public, and alleviate some of the so-called "mysteries" surrounding hydraulic fracturing. If you have any questions about this request for the voluntary efforts of Utah's petroleum industry, please direct them to John Rogers, Associate Director of Oil and Gas at 801-538-5349, by email at [johnrogers@utah.gov](mailto:johnrogers@utah.gov).

Sincerely,



John R. Baza  
Director



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 24 2012

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010APPLICATION FOR PERMIT TO DRILL OR REENTER **BLM**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 1420H626261
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BILL BARRETT CORPORATION Contact: VENESSA LANGMACHER E-Mail: vlangmacher@billbarrettcorp.com		7. If Unit or CA Agreement, Name and No.
3a. Address 1099 18TH STREET SUITE 2300 DENVER, CO 80202	3b. Phone No. (include area code) Ph: 303-312-8172 Fx: 303-291-0420	8. Lease Name and Well No. 4-5D-45 BTR
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW Lot 4 755FNL 1292FWL 40.167258 N Lat, 110.478953 W Lon At proposed prod. zone NWNW Lot 4 810FNL 810FWL 40.167103 N Lat, 110.480672 W Lon		9. API Well No. 43-013-51242
14. Distance in miles and direction from nearest town or post office* 4.2 MILES WEST OF DUCHESNE, UT		10. Field and Pool, or Exploratory STARVATION
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 810' (BTM. HOLE)	16. No. of Acres in Lease 638.80	11. Sec., T., R., M., or Blk. and Survey or Area Sec 5 T4S R5W Mer UBM
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1699' P&A	19. Proposed Depth 8848 MD 8814 TVD	12. County or Parish DUCHESNE
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5782 GL	22. Approximate date work will start 06/01/2012	13. State UT
23. Estimated duration 60 DAYS (D&C)		17. Spacing Unit dedicated to this well 640.00
20. BLM/BIA Bond No. on file LPM8874725		

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |  |  |
|--|--|
| 1. Well plat certified by a registered surveyor.<br>2. A Drilling Plan.<br>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).<br>5. Operator certification<br>6. Such other site specific information and/or plans as may be required by the authorized officer. |
|--|--|

25. Signature (Electronic Submission)	Name (Printed/Typed) VENESSA LANGMACHER Ph: 303-312-8172	Date 02/21/2012
Title SENIOR PERMIT ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date JUN 28 2012
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #131327 verified by the BLM Well Information System  
For BILL BARRETT CORPORATION, sent to the Vernal  
Committed to AFMSS for processing by LESLIE ROBINSON on 02/27/2012 ()

## NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

UDOGM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

RECEIVED

AUG 10 2012

DIV. OF OIL, GAS &amp; MINING

1461788A9

1005 8/2/11



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Bill Barrett Corporation  
Well No: 4-5D-45 BTR  
API No: 43-013-51242

Location: Lot 4, Sec. 5, T4S R5W  
Lease No: 14-20-H62-6261  
Agreement: N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm_ut_vn_opreport@blm.gov</a>
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Site Specific Conditions of Approval:**

- Production Equipment will be painted Beetle Green to help blend into the surrounding vegetation.
- See Exhibit One of the approved EA U&O-FY12-Q2-059 for additional mitigation measures that must be followed for the proposed action. There are also site specific COAs of concern towards the back of that document that must be adhered to.

**General Conditions of Approval:**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipelines.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- 
- Bill Barrett Corporation will implement a "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, COA's, and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.

- The personnel from the Ute Tribe Energy & Minerals Department should be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.



**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Production casing cement shall be brought up and into the surface casing. The minimum cement top is 400 ft above the surface casing shoe.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person

making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and

Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent



Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000
<b>5. FIELD and POOL or WILDCAT:</b> ALTAMONT		<b>6. COUNTY:</b> DUCHESNE
<b>7. STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>11/1/2012</b>	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
  
 BBC hereby requests to change the surface casing from 10-3/4" to 9-5/8". Please see revised casing and cementing programs attached.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
  
**Date:** October 04, 2012  
**By:** *Derek Quist*

<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/28/2012	

**4-5D-45 BTR****Casing Program**

<b><u>Hole Size</u></b>	<b><u>SETTING DEPTH</u></b> <b><u>(FROM)</u></b> <b><u>(TO)</u></b>		<b><u>Casing</u></b> <b><u>Size</u></b>	<b><u>Casing</u></b> <b><u>Weight</u></b>	<b><u>Casing</u></b> <b><u>Grade</u></b>	<b><u>Thread</u></b>	<b><u>Condition</u></b>
26"	Surface	80'	16"	65#			
12 1/4"	Surface	2,800'	9 5/8"	36#	J or K 55	ST&C	New
8 3/4"	Surface	TD	5 1/2"	17#	P-110	LT&C	New

**Cementing Program**

16" Conductor Casing	Grout
9 5/8" Surface Casing	Lead: 410 sx Halliburton Light Premium with additives mixed at 11.0 ppg (yield = 3.16 ft <sup>3</sup> /sx) circulated to surface with 75% excess. TOC @ Surface Tail: 210 sx Halliburton Premium Plus cement with additives mixed at 14.8 ppg (yield = 1.36 ft <sup>3</sup> /sx), calculated hole volume with 75% excess. TOC @ 2,300'
5 1/2" Production Casing	Lead: 660 sx Tuned Light cement with additives mixed at 11.0 ppg (yield = 2.31 ft <sup>3</sup> /sx). TOC @ 2,300' Tail: 690 sx Halliburton Econocem cement with additives mixed at 13.5 ppg (yield = 1.42 ft <sup>3</sup> /sx). Top of cement to be determined by log and sample evaluation; estimated TOC @ 6,313'

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
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<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000
<b>PHONE NUMBER:</b> 303 312-8164 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>12/5/2012</b>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			
		<input checked="" type="checkbox"/> <b>OTHER</b>	OTHER: <input style="width: 100px;" type="text" value="Cuttings"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

This well was permitted as a closed loop system due to the close proximity to the lake, so it will not have a pit. A cuttings storage area was permitted, but due to the lake, BBC is proposing to use RNI's mobile/sealed cuttings tanks to haul off to their approved facility as the well is drilled so no cuttings are stored on the ground at the wellsite.

**REQUEST DENIED**  
**Utah Division of**  
**Oil, Gas and Mining**

**Date:** November 13, 2012

**By:**

<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/6/2012	



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>																														
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<div style="text-align: right;"> <b>Accepted by the</b>  <b>Utah Division of</b>  <b>Oil, Gas and Mining</b>   <b>Date:</b> November 15, 2012  <b>By:</b> <u>Derek Quist</u> </div>																																
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst																														
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/14/2012																															

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
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<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
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<b>PHONE NUMBER:</b> 303 312-8164 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

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TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: <b>1/31/2013</b>	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

This well was spud on 1/31/2013 by Triple A Drilling at 8:00 am.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 February 13, 2013

<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/4/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
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<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR	
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<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8164 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

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CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA


TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>1/28/2013</b>	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Cuttings"/>
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:			
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:			
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The drill cuttings for the subject well will be stored in a bermed area on the pad until the drilling rig is gone. After the cuttings have been properly tested, they will be moved to the 3-36-36 property and 16-9-36 road which are BBC owned surface.

**REQUEST DENIED**  
**Utah Division of**  
**Oil, Gas and Mining**

**Date:** February 15, 2013

**By:** 

<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 1/28/2013

## BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corporation Rig Name/# Triple A Drilling  
Submitted By Venessa Langmach Phone Number 303-312-8172  
Well Name/Number 4-5D-45 BTR  
Qtr/Qtr NWNW Section 5 Township 4S Range 5W  
Lease Serial Number 1420H626261  
API Number 4301351242

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 1/31/2013 8:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time \_\_\_\_\_ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

JAN 30 2013

DIV. OF OIL, GAS &amp; MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks \_\_\_\_\_  
\_\_\_\_\_

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Bill Barrett Corporation Operator Account Number: N 2165  
Address: 1099 18th Street, Suite 2300  
city Denver  
state CO zip 80202 Phone Number: (303) 312-8172

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351718	3-13D-46 BTR		NENW	13	4S	6W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	<u>new</u>	<u>18881</u>	<u>1/23/2013</u>			<u>2/19/2013</u>	
<b>Comments:</b> Spudding Operation was conducted by Triple A Drilling @ 7:00 am. <u>GR-WS</u>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351242	4-5D-45 BTR		NWNW	5	4S	5W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	<u>new</u>	<u>18882</u>	<u>1/31/2013</u>			<u>2/19/2013</u>	
<b>Comments:</b> Spudding Operation was conducted by Triple A Drilling @ 8:00 am. <u>GR-WS</u>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351157	4-9D-45 BTR		NWNW	9	4S	5W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	<u>new</u>	<u>18883</u>	<u>1/31/2013</u>			<u>2/19/2013</u>	
<b>Comments:</b> Spudding Operation was conducted by Triple A Drilling @ 8:00 am. <u>GR-WS</u>							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Venessa Langmacher

Name (Please Print)

Venessa Langmacher

Signature

Sr Permit Analyst

2/4/2013

Title

Date

FEB 05 2013



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512420000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8164 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 2/28/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Spud February 2013.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 March 07, 2013

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/5/2013

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By Lawrence Lorenzen Phone Number 303-353-5350

Well Name/Number 4-5D-45 BTR  
Qtr/Qtr NW/NW Section 5 Township 4S Range 5W  
Lease Serial Number 1420H626261  
API Number 43-013-51242

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 3/13/2013 7:00 AM ☐ PM ☒

BOPE

- ☒ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time 3/14/2013 11:00 AM ☐ PM ☒

Remarks Times are estimated

RECEIVED

MAR 13 2013

DIV. OF OIL, GAS & MINING

BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By Pat Clark Phone Number 303-353-5350  
Well Name/Number 4-5D-45 BTR  
Qtr/Qtr NW/NW Section 5 Township 4S Range 5W  
Lease Serial Number 1420H626261  
API Number 43-013-51242

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☒ Other

Date/Time 3/16/2013 2:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other


**RECEIVED**

**MAR 15 2013**

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks P&A - perforating @ 1620', cmt thru perms. Time is estimated

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261			
<b>1. TYPE OF WELL</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah			
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>			
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000			
<b>PHONE NUMBER:</b> 303 312-8164 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT			
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>3/15/2013</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input checked="" type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  BBC proposes to plug the subject well due to the shallow gas kick creating the recent rig fire. Please see procedure attached.  <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  </div> <div style="text-align: right;"> <p><b>Accepted by the Utah Division of Oil, Gas and Mining</b></p> <p><b>FOR RECORD ONLY</b></p> <p>April 04, 2013</p> </div> </div>					
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst			
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/15/2013			



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43013512420000**

**Work completed prior to approval.**



#### 4-5D-45 BTR Plugging Procedure

Once we get the rig cleaned up, we plan to plug the well as follows, pending your approval, leaving the 4-1/2" in the hole since we can't pull it out.

This could happen tomorrow, so please let us know if you have any questions.

16" conductor set and cemented at 80' BGL

12-1/4" hole to 2080'

LIH: Bit, motor, 3 PT RMR, shock sub, NMDC, gap sub, antenna sub, NMDC, 3 PT RMR, XO, 9-6 1/2" DC's, 42 jts 4-1/2" HWDP to surface

Keep hole full at all times

Have at least 400 sx of 14.8 ppg cement on location for top out.

1. While continue to circulate with rig pumps, run 1" in the hole as deep as possible, up to 900' if it will go. Pump through to insure pipe is clear.
2. RU Halliburton on 4-1/2" DP, establish PIR at 1, 2 and 3 bpm, record pressures for each. Continue to circ while RUWL.
3. RUWL. RIH and perforate deepest joint of HWDP at 1620' 4 shots. Shoot twice if necessary. Current TD is 2080'.
4. Establish PIR as above in step #2 and determine if we successfully perforated. Reperf if necessary.
5. Be rigged up prior to pumping any cement to immediately pump cement down the 1" (if no cement to surface) or fill the backside with cement (if cement to surface and it is falling).
6. Pump 11.0 ppg Tunelight (FL < 200 cc) down the DP and attempt to circ to surface. No FLA in cement so we don't plug. Have enough cement for 100% excess, including inside the 4-1/2" DP (about 130 ft<sup>3</sup>). Total of about 2294 ft<sup>3</sup> + 130 ft<sup>3</sup> = 2424 ft<sup>3</sup>  
About 1050 sx 11.0 ppg Tunelight cement. 2.30 ft<sup>3</sup>/sx yield. Halliburton is working on the slurry.  
Pump cement at 6-8 bpm
7. Once good cement to surface, stop mixing and pumping cement leaving DP and annulus full of cement. Monitor for fall back on both sides.
8. Top out with 14.8 ppg cement with 2%-3% CaCl<sub>2</sub>, keeping hole full. Continue to top out as necessary until no fall back and both sides full.
9. If no cement to surface and all the 11.0 ppg is gone, tie onto the 1" and top out with 14.8 ppg cement with 2% CaCl<sub>2</sub> as necessary.
10. Cut off 4-1/2" DP at floor. Will later cut it off below ground level once BOP off, and wellhead removed.
11. Repair rig as necessary on this location.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
<b>1. TYPE OF WELL</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000
<b>PHONE NUMBER:</b> 303 312-8164 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/15/2013	<input type="checkbox"/> SPUD REPORT Date of Spud:	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Attached is the report on the plug and abandon that took place on this well from 3/13/2013 to 3/15/2013.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 21, 2013		
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/19/2013	

**4-5D-45 BTR 3/7/2013 22:00 - 3/8/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
22:00	8.00	06:00	1	RIGUP & TEARDOWN	Rig down Prepare for trucks. Move camps.

**4-5D-45 BTR 3/8/2013 06:00 - 3/9/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	MIRU, Mud tanks and entire backyard set in.

**4-5D-45 BTR 3/9/2013 06:00 - 3/10/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	Move and assemble Substructure and derrick. Derrick ready to raise.

**4-5D-45 BTR 3/10/2013 06:00 - 3/11/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.00	02:00	1	RIGUP & TEARDOWN	Raise derrick, Continue rig up.
02:00	2.50	04:30	21	OPEN	Rig up conductor, flowline and turnbuckles.
04:30	1.50	06:00	21	OPEN	Rack & strap BHA

**4-5D-45 BTR 3/11/2013 06:00 - 3/12/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	7.00	13:00	20	DIRECTIONAL WORK	P/U dir tools & orient drill to 179'
13:00	0.50	13:30	7	LUBRICATE RIG	Rig service
13:30	5.00	18:30	2	DRILL ACTUAL	Drig 179-317'.
18:30	0.50	19:00	7	LUBRICATE RIG	Rig service
19:00	11.00	06:00	2	DRILL ACTUAL	Drig 317-997'. Survey @ 895' .42 inc 259 az. MW 8.6+#/gal 39 vis

**4-5D-45 BTR 3/12/2013 06:00 - 3/13/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.50	02:30	2	DRILL ACTUAL	Drill 997' - 2083'.
02:30	3.50	06:00	21	OPEN	Took gas kick, circulated pits & weight up to 9.5 ppg. Gas bubble to surface @ 05:00, flash fire on floor. Drill line parted @ 05:15, dropped top drive to floor. @ 06:00 circulating 9.5 kill mud @ 110 strokes, 1200 psi.

**4-5D-45 BTR 3/13/2013 06:00 - 3/14/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 9.5 ppg, 46 vis until 23:00, raised mw to 9.8 ppg. BBC and Nabors safety standdown, planning for remedial action.

**4-5D-45 BTR 3/14/2013 06:00 - 3/15/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Fire marshall inspected rig. Rigged up 500 ton crane, pulled catwalk out of way.

**4-5D-45 BTR 3/15/2013 06:00 - 3/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.00	19:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Put counterweights on crane, tied on to top drive. Flow check, pull top drive up and set slips. Cut drilling line and tie off, remove blocks. Establish PIR (1 bpm-41 psi;2 bpm-60 psi;3 bpm-143 psi).
19:00	2.50	21:30	21	OPEN	R/U DCT wireline, perforate HWDP @ 1666'.
21:30	6.00	03:30	5	COND MUD & CIRC	C&C hole/wait on cement.

**4-5D-45 BTR 3/16/2013 06:00 - 3/17/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	5	COND MUD & CIRC	Circulate well @ 70 strokes, 725 psi/wait on cement.
12:00	2.00	14:00	17	PLUG BACK	HSM. R/U HES. Pressure test to 3000 psi, pump 30 bbls tuned lite spacer @ 10.5 ppg, 4.15 yld, 27.82 gps H2O. Mix and pump 610 sx(247 bbls) tuned light cement @ 11 ppg, 2.28 yld, 10.48 gps H2O @ 4 bpm. Pump 3.5 bbls to clear lines. Full returns, max pressure 400 psi. Returned 25 bbls cmt to surface. Cement fell 6" in 45 minutes. Drained and flushed conductor. Cement job witnessed and okayed by Glade Rich of Vernal BLM.
14:00	16.00	06:00	13	WAIT ON CEMENT	Wait on cement. Checked cmt @ 23:00, too soft to cut off.

**4-5D-45 BTR 3/17/2013 06:00 - 3/18/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	13	WAIT ON CEMENT	WOC. Repair rig.
10:00	6.00	16:00	21	OPEN	Used gas sniffer on DP and conductor, no indications of gas. Cut on conductor, Gas indications up through cement. Cut off conductor and DP, weld 1/2" plate w/2" 3000# ball valve on top of conductor. Well contained, BLM and State contacted.
16:00	14.00	06:00	8	REPAIR RIG	Removed and replaced top drive, blocks, ST-80 iron roughneck. Drawworks readied for removal.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261			
<b>1. TYPE OF WELL</b>		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah			
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>			
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000			
<b>5. FIELD and POOL or WILDCAT:</b> ALTAMONT		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT			
<b>6. COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 3/22/2013  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100%;" type="text" value="Fish Wellbore"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100%;" type="text" value="Fish Wellbore"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>BBC requests to re-enter this wellbore per the attached fishing procedure.</p> </div> <div style="width: 35%; text-align: right;"> <p><b>Approved by the Utah Division of Oil, Gas and Mining</b></p> <p><b>Date:</b> March 25, 2013</p> <p><b>By:</b> </p> </div> </div>					
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst			
<b>SIGNATURE</b> N/A		<b>DATE</b> 3/22/2013			



**4-5D-45 BTR Fishing Procedure**

**3/22/2013**

1. Skid Nabors M22 over the 4-5D-45 BTR.
2. NU 16" riser, flowline and rotating head/diverter.
3. PU washover shoe and +/- 100' of washpipe, 9 or 12 6-1/2" DCs and washover 4-1/2" DP.
4. Depending on how the washout operation goes, recover as much of the fish as possible.
5. Depending on how much of the fish we recover, we will either finish the surface hole and continue drilling per the APD or we will spot appropriate number of sacks of 15.6 ppg cement from top of fish to surface to complete P&A.

Fish: PDC bit, motor, 3 PT RMR, Shock Sub, NMDC, gap sub, antenna sub, NMDC, 3 PT RMR, XO sub, 9 6-1/2" DC's (279'), 42 jts 4-1/2" HWDP, 4-1/2" DP to surface

Top of fish at surface

Bottom of fish at 2083'

Perf in 4-1/2" HWDP @ 1666'. Cemented from 1666' to surface with 610 sx (247 bbls) 11.0 ppg Tune Light. Had 25 bbls cement to surface. Cement fell 6" in 45 min.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
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<b>7. STATE:</b> UTAH					
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<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/5/2013  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
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<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> BBC recovered all the fish and are going in the hole to clean it up and drill another 200' or so. Current MW is 9.8 ppg and zero units gas on the gas detector. No losses. Current TD 2083'. We will probably run and cement the 9-5/8" probably sometime tomorrow. Set at 9-5/8" 36# J55 STC about 2300'. Top of tail (14.8 ppg) at 1500', 11.5 ppg lead to surface. Plan to use 100% excess. Have 200' of 1" on location, run immediately after bumping plug and top out with 15.6 ppg cement with 2% CaCl2 even if we get 11.5 to surface and cement doesn't want to fall back. Top 9-5/8" centralizer will be run at 200' BGL. Have 400 sx of 15.6 ppg on location for top out.					
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> </div> <div style="width: 35%; text-align: right;"> <p><b>Accepted by the</b>  <b>Utah Division of</b>  <b>Oil, Gas and Mining</b></p> <p><b>Date:</b> April 04, 2013</p> <p><b>By:</b> <u><i>Derek Quist</i></u></p> </div> </div>					
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst			
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/4/2013				

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other			5. Lease Serial No. 1420H626261		
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____			6. If Indian, Allottee or Tribe Name		
2. Name of Operator BILL BARRETT CORPORATION			Contact: VENESSA LANGMACHER E-Mail: vlangmacher@billbarrettcorp.com		
3. Address 1099 18TH STREET SUITE 2300 DENVER, CO 80202			3a. Phone No. (include area code) Ph: 303-312-8172		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NWNW Lot 4 755FNL 1292FWL At top prod interval reported below NWNW Lot 4 755FNL 1292FWL At total depth NWNW Lot 4 759FNL 1283FWL			8. Lease Name and Well No. 4-5D-45 BTR		
14. Date Spudded 01/31/2013			15. Date T.D. Reached 03/13/2013		
16. Date Completed <b>3/15/2013</b> <input checked="" type="checkbox"/> D & A <input type="checkbox"/> Ready to Prod.			9. API Well No. 43-013-51242		
18. Total Depth: MD 2087 TVD 2087			19. Plug Back T.D.: MD TVD		
20. Depth Bridge Plug Set: MD TVD			10. Field and Pool, or Exploratory ALTAMONT		
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)			11. Sec., T., R., M., or Block and Survey or Area Sec 5 T4S R5W Mer UBM		
22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)			12. County or Parish DUCHESE		
23. Casing and Liner Record (Report all strings set in well)			13. State UT		
24. Tubing Record			17. Elevations (DF, KB, RT, GL)* 5782 GL		

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26.000	16.000 COND	65.0	0	80	80			0	

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)						
B)						
C)						
D)						

Depth Interval	Amount and Type of Material

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #201974 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED

RECEIVED  
RECEIVED  
MAR 20 2013  
MAR 20 2013  
DIV OF OIL, GAS & MINING  
DIV OF OIL, GAS & MINING

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

### 30. Summary of Porous Zones (Include Aquifers):

### 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

33. Circle enclosed attachments:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Name (please print) VENESSA LANGMACHER

Title SENIOR PERMIT ANALYST

Signature \_\_\_\_\_ (Electronic Submission) Bruce J. Gammaker Date 03/19/2013

Date 03/19/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

# **Bill Barrett Corp**

Duchesne County, UT (NAD 1927)

Sec. 5-T4S-R5W

4-5D-45 BTR

Plan A

Design: Sperry Final Survey

## **Sperry Drilling Services Standard Report**

19 March, 2013

Well Coordinates: 669,615.48 N, 2,285,536.19 E (40° 10' 02.28" N, 110° 28' 41.67" W)  
Ground Level: 5,773.00 ft

Local Coordinate Origin:	Centered on Well 4-5D-45 BTR
Viewing Datum:	RKB 22' @ 5795.00ft (Nabors M22)
TVDs to System:	N
North Reference:	True
Unit System:	API - US Survey Feet - Custom

Geodetic Scale Factor Applied

Version: 2003.16 Build: 431

**HALLIBURTON**



## Design Report for 4-5D-45 BTR - Sperry Final Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00
154.00	0.40	198.800	154.00	-0.51	-0.17	0.23	0.26
<b>First Sperry MWD Survey @ 154.00' MD</b>							
215.00	0.51	210.160	215.00	-0.95	-0.38	0.48	0.23
276.00	0.53	223.340	275.99	-1.39	-0.71	0.86	0.20
337.00	0.38	210.900	336.99	-1.76	-1.01	1.20	0.29
399.00	0.30	244.790	398.99	-2.01	-1.26	1.48	0.34
460.00	0.30	267.600	459.99	-2.08	-1.56	1.79	0.19
521.00	0.39	327.310	520.99	-1.92	-1.83	2.04	0.58
589.00	0.46	318.370	588.99	-1.52	-2.14	2.30	0.14
650.00	0.44	319.350	649.99	-1.16	-2.46	2.57	0.04
711.00	0.26	302.240	710.98	-0.91	-2.73	2.81	0.34
772.00	0.21	291.160	771.98	-0.79	-2.95	3.02	0.11
834.00	0.32	274.790	833.98	-0.74	-3.22	3.29	0.21
895.00	0.42	259.060	894.98	-0.76	-3.61	3.68	0.23
956.00	0.76	243.550	955.98	-0.99	-4.20	4.28	0.61
1,017.00	0.85	230.900	1,016.97	-1.45	-4.91	5.04	0.33
1,078.00	0.28	236.370	1,077.97	-1.82	-5.38	5.56	0.94
1,139.00	0.29	73.180	1,138.97	-1.86	-5.36	5.54	0.92
1,201.00	0.74	34.280	1,200.97	-1.48	-4.99	5.12	0.88
1,261.00	0.89	19.210	1,260.96	-0.72	-4.61	4.67	0.43
1,323.00	0.68	12.360	1,322.96	0.09	-4.38	4.34	0.37
1,384.00	0.31	357.440	1,383.95	0.61	-4.31	4.21	0.64
1,445.00	0.29	284.830	1,444.95	0.82	-4.46	4.34	0.58
1,508.00	0.60	240.480	1,507.95	0.69	-4.90	4.79	0.70
1,572.00	0.78	221.060	1,571.95	0.20	-5.48	5.42	0.46
1,635.00	0.52	238.730	1,634.94	-0.27	-6.01	6.00	0.52
1,698.00	0.52	295.550	1,697.94	-0.30	-6.51	6.50	0.79
1,762.00	0.72	312.860	1,761.94	0.10	-7.07	7.01	0.42
1,825.00	0.81	242.190	1,824.93	0.16	-7.75	7.68	1.41
1,888.00	1.31	206.950	1,887.92	-0.69	-8.47	8.49	1.27
1,951.00	0.99	193.220	1,950.91	-1.86	-8.92	9.08	0.67
2,015.00	0.77	176.380	2,014.90	-2.82	-9.02	9.29	0.53
<b>Last Sperry MWD Survey @ 2015.00' MD</b>							
2,087.00	0.77	176.380	2,086.89	-3.79	-8.96	9.34	0.00
<b>Straight Line Projection to TD @ 2087.00' MD</b>							

### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
154.00	154.00	-0.51	-0.17	First Sperry MWD Survey @ 154.00' MD
2,015.00	2,014.90	-2.82	-9.02	Last Sperry MWD Survey @ 2015.00' MD
2,087.00	2,086.89	-3.79	-8.96	Straight Line Projection to TD @ 2087.00' MD

## Design Report for 4-5D-45 BTR - Sperry Final Survey

### Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target	4-5D-45 BTR_BHL Plat	263.385	Slot	0.00	0.00	0.00

### Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
154.00	2,087.00	Sperry MWD Surveys	MWD

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
4-5D-45 BTR_BHL F	0.00	0.00	8,795.00	-55.72	-480.44	669,554.28	2,285,056.46	40° 10' 1.729 N	110° 28' 47.860 W
- actual wellpath misses target center by 6724.85ft at 2087.00ft MD (2086.89 TVD, -3.79 N, -8.96 E)									
- Point									
4-5D-45 BTR_ZONE	0.00	0.00	6,350.00	-55.72	-480.44	669,554.28	2,285,056.46	40° 10' 1.729 N	110° 28' 47.860 W
- actual wellpath misses target center by 4289.41ft at 2087.00ft MD (2086.89 TVD, -3.79 N, -8.96 E)									
- Rectangle (sides W200.00 H200.00 D2,445.00)									
4-5D-45 BTR_SHL	0.00	0.00	0.00	0.00	0.00	669,615.48	2,285,536.19	40° 10' 2.280 N	110° 28' 41.671 W
- actual wellpath hits target center									
- Point									
4-5D-45 BTR_Sectic	0.00	0.00	0.00	0.00	0.00	669,615.48	2,285,536.19	40° 10' 2.280 N	110° 28' 41.671 W
- actual wellpath hits target center									
- Polygon									
Point 1			-1,292.00	755.00	670,355.61	2,284,235.76			
Point 2			3,986.00	755.00	670,415.90	2,289,512.97			
Point 3			3,986.00	-1,857.00	667,804.29	2,289,542.81			
Point 4			-1,292.00	-1,912.00	667,689.01	2,284,266.22			
Point 5			-1,292.00	755.00	670,355.61	2,284,235.76			
4-5D-45 BTR_Setba	0.00	0.00	0.00	0.00	0.00	669,615.48	2,285,536.19	40° 10' 2.280 N	110° 28' 41.671 W
- actual wellpath hits target center									
- Polygon									
Point 1			-632.00	95.00	669,703.25	2,284,903.20			
Point 2			3,326.00	95.00	669,748.46	2,288,860.61			
Point 3			3,326.00	-1,857.00	667,796.75	2,288,882.90			
Point 4			-632.00	-1,912.00	667,696.55	2,284,926.13			
Point 5			-632.00	95.00	669,703.25	2,284,903.20			

## North Reference Sheet for Sec. 5-T4S-R5W - 4-5D-45 BTR - Plan A

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 22' @ 5795.00ft (Nabors M22). Northing and Easting are relative to 4-5D-45 BTR

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is 111° 30' 0.000 W°, Longitude Origin: 0° 0' 0.000 E°, Latitude Origin: 40° 39' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99991560

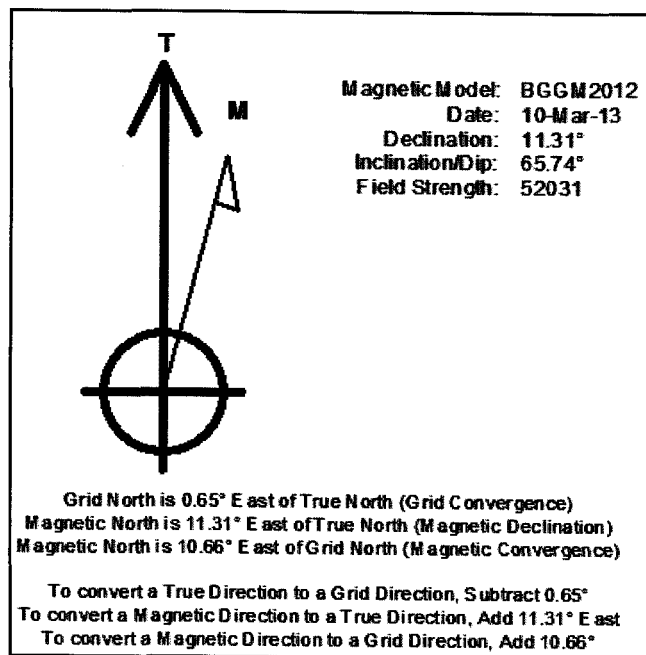
Grid Coordinates of Well: 669,615.48 ft N, 2,285,536.19 ft E

Geographical Coordinates of Well: 40° 10' 02.28" N, 110° 28' 41.67" W

Grid Convergence at Surface is: 0.65°

Based upon Minimum Curvature type calculations, at a Measured Depth of 2,087.00ft  
the Bottom Hole Displacement is 9.73ft in the Direction of 247.07° (True).

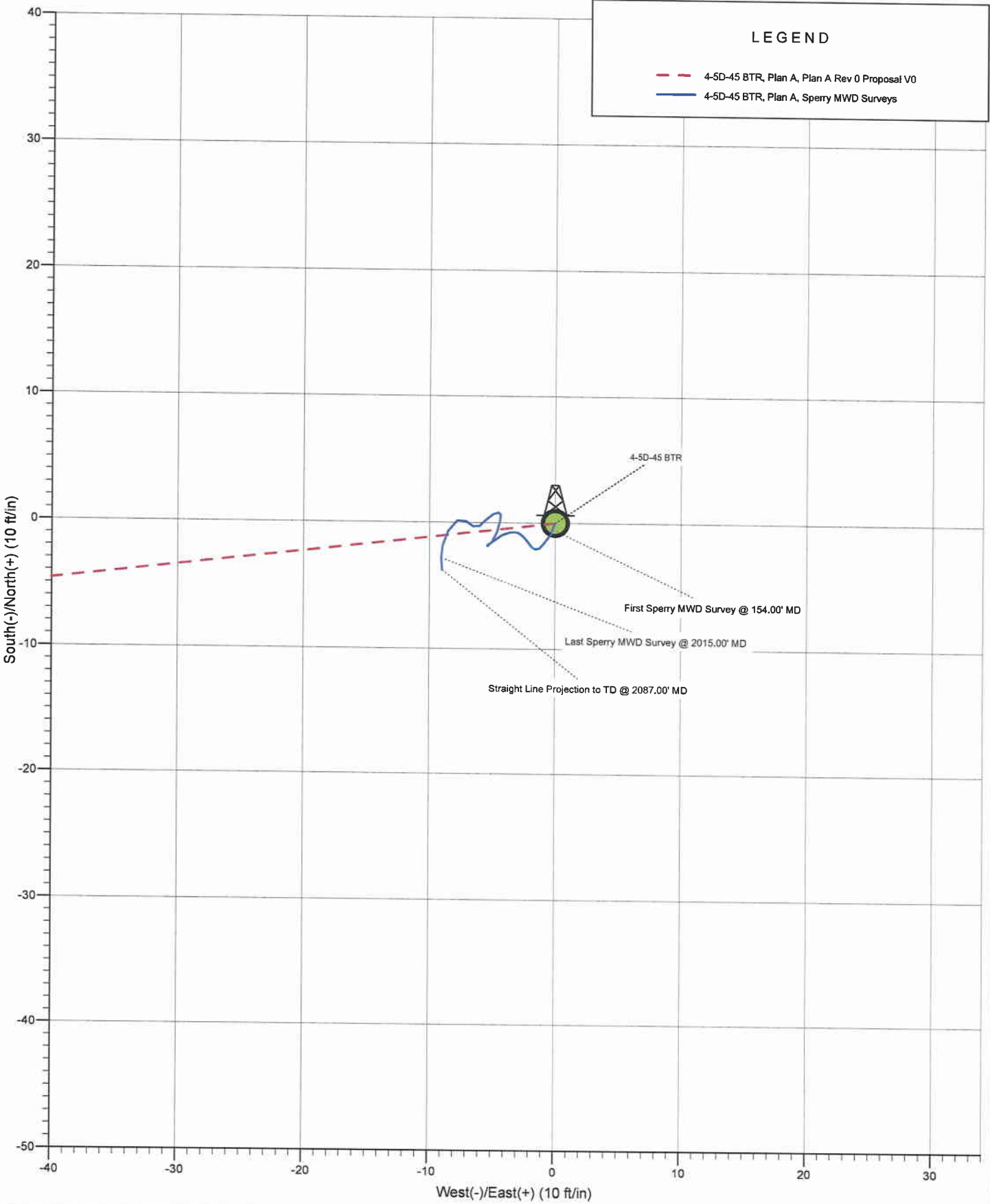
Magnetic Convergence at surface is: -10.66° (10 March 2013, , BGGM2012)



Project: Duchesne County, UT (NAD 1927)  
Site: Sec. 5-T4S-R5W  
Well: 4-5D-45 BTR

Bill Barrett Corp

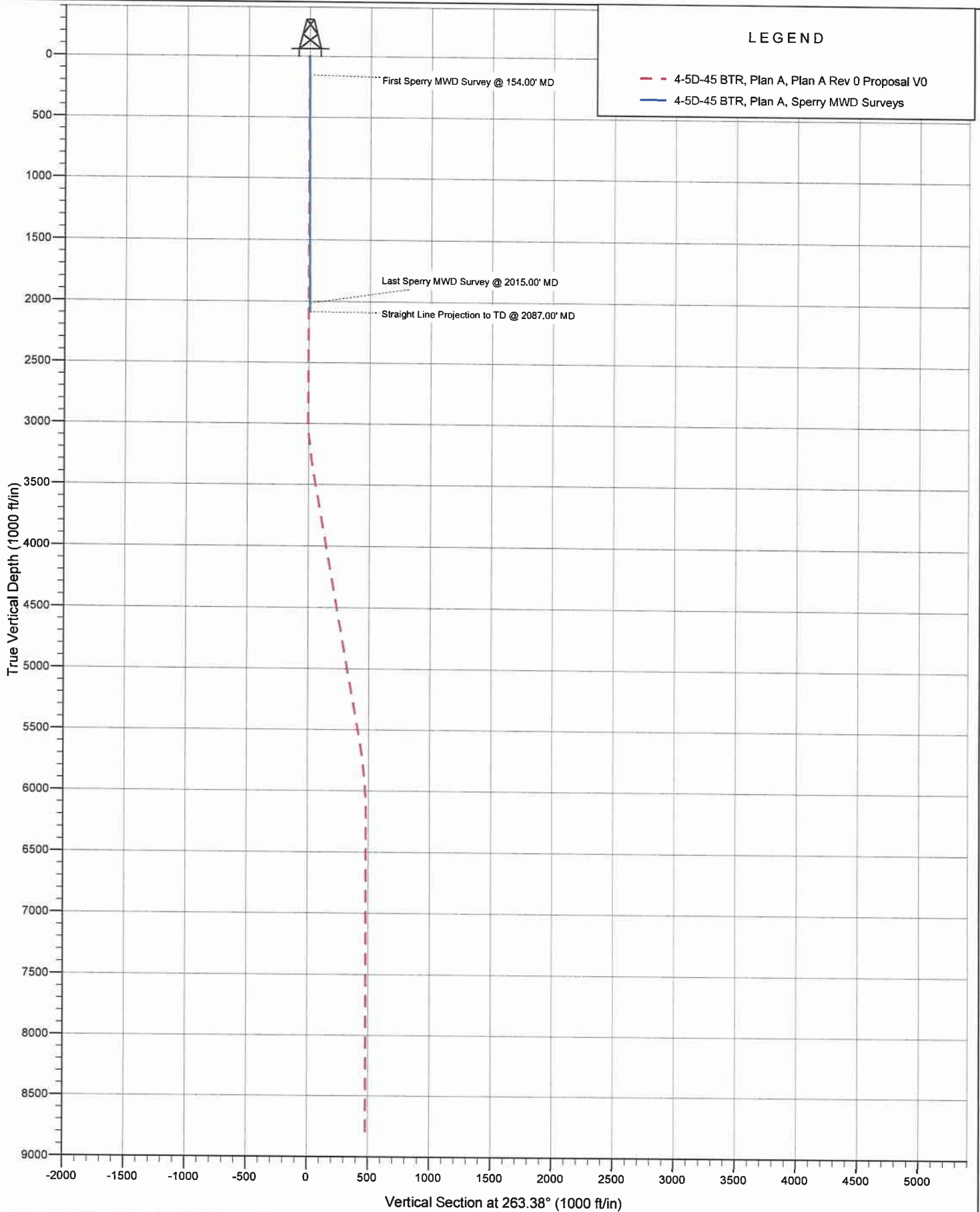
HALLIBURTON  
Sperry Drilling



Project: Duchesne County, UT (NAD 1927)  
Site: Sec. 5-T4S-R5W  
Well: 4-5D-45 BTR

# Bill Barrett Corp

**HALLIBURTON**  
Sperry Drilling





# Bill Barrett Corporation

## 4-5D-45 BTR 3/7/2013 22:00 - 3/8/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
22:00	8.00	06:00	1	RIGUP & TEARDOWN	Rig down Prepare for trucks. Move camps.

## 4-5D-45 BTR 3/8/2013 06:00 - 3/9/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	MIRU, Mud tanks and entire backyard set in.

## 4-5D-45 BTR 3/9/2013 06:00 - 3/10/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	Move and assemble Substructure and derrick. Derrick ready to raise.

## 4-5D-45 BTR 3/10/2013 06:00 - 3/11/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.00	02:00	1	RIGUP & TEARDOWN	Raise derrick, Continue rig up.
02:00	2.50	04:30	21	OPEN	Rig up conductor, flowline and turnbuckles.
04:30	1.50	06:00	21	OPEN	Rack & strap BHA

## 4-5D-45 BTR 3/11/2013 06:00 - 3/12/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	7.00	13:00	20	DIRECTIONAL WORK	P/U dir tools & orient drill to 179'
13:00	0.50	13:30	7	LUBRICATE RIG	Rig service
13:30	5.00	18:30	2	DRILL ACTUAL	Drig 179-317'.
18:30	0.50	19:00	7	LUBRICATE RIG	Rig service
19:00	11.00	06:00	2	DRILL ACTUAL	Drig 317-997'. Survey @ 895' .42 inc 259 az. MW 8.6+##/gal 39 vis

## 4-5D-45 BTR 3/12/2013 06:00 - 3/13/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.50	02:30	2	DRILL ACTUAL	Drill 997' - 2083'.
02:30	3.50	06:00	21	OPEN	Took gas kick, circulated pits & weight up to 9.5 ppg. Gas bubble to surface @ 05:00, flash fire on floor. Drill line parted @ 05:15, dropped top drive to floor. @ 06:00 circulating 9.5 kill mud @ 110 strokes, 1200 psi.

## 4-5D-45 BTR 3/13/2013 06:00 - 3/14/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 9.5 ppg, 46 vis until 23:00, raised mw to 9.8 ppg. BBC and Nabors safety standdown, planning for remedial action.

## 4-5D-45 BTR 3/14/2013 06:00 - 3/15/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Fire marshall inspected rig. Rigged up 500 ton crane, pulled catwalk out of way.



**Bill Barrett Corporation****4-5D-45 BTR 3/15/2013 06:00 - 3/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB)	Primary Job Type 0.0 Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.00	19:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Put counterweights on crane, tied on to top drive. Flow check, pull top drive up and set slips. Cut drilling line and tie off, remove blocks. Establish PIR (1 bpm-41 psi; 2 bpm-60 psi; 3 bpm-143 psi).
19:00	2.50	21:30	21	OPEN	R/U DCT wireline, perforate HWDP @ 1666'.
21:30	6.00	03:30	5	COND MUD & CIRC	C&C hole/wait on cement.

**4-5D-45 BTR 3/16/2013 06:00 - 3/17/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB)	Primary Job Type 0.0 Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	5	COND MUD & CIRC	Circulate well @ 70 strokes, 725 psi/wait on cement.
12:00	2.00	14:00	17	PLUG BACK	HSM. R/U HES. Pressure test to 3000 psi, pump 30 bbls tuned lite spacer @ 10.5 ppg, 4.15 yld, 27.82 gps H2O. Mix and pump 610 sx(247 bbls) tuned light cement @ 11 ppg, 2.28 yld, 10.48 gps H2O @ 4 bpm. Pump 3.5 bbls to clear lines. Full returns, max pressure 400 psi. Returned 25 bbls cmt to surface. Cement fell 6" in 45 minutes. Drained and flushed conductor. Cement job witnessed and okayed by Glade Rich of Vernal BLM.
14:00	16.00	06:00	13	WAIT ON CEMENT	Wait on cement. Checked cmt @ 23:00, too soft to cut off.

**4-5D-45 BTR 3/17/2013 06:00 - 3/18/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB)	Primary Job Type 0.0 Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	13	WAIT ON CEMENT	WOC. Repair rig.
10:00	6.00	16:00	21	OPEN	Used gas sniffer on DP and conductor, no indications of gas. Cut on conductor, Gas indications up through cement. Cut off conductor and DP, weld 1/2" plate w/2" 3000# ball valve on top of conductor. Well contained, BLM and State contacted.
16:00	14.00	06:00	8	REPAIR RIG	Removed and replaced top drive, blocks, ST-80 iron roughneck. Drawworks readied for removal.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512420000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8164 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/1/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Attached is the March 2013 Drilling Activity for this well.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 April 17, 2013

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 4/5/2013

**4-5D-45 BTR 3/7/2013 22:00 - 3/8/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
22:00	8.00	06:00	1	RIGUP & TEARDOWN	Rig down Prepare for trucks. Move camps.

**4-5D-45 BTR 3/8/2013 06:00 - 3/9/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	MIRU, Mud tanks and entire backyard set in.

**4-5D-45 BTR 3/9/2013 06:00 - 3/10/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	Move and assemble Substructure and derrick. Derrick ready to raise.

**4-5D-45 BTR 3/10/2013 06:00 - 3/11/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.00	02:00	1	RIGUP & TEARDOWN	Raise derrick, Continue rig up.
02:00	2.50	04:30	21	OPEN	Rig up conductor, flowline and turnbuckles.
04:30	1.50	06:00	21	OPEN	Rack & strap BHA

**4-5D-45 BTR 3/11/2013 06:00 - 3/12/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	7.00	13:00	20	DIRECTIONAL WORK	P/U dir tools & orient drill to 179'
13:00	0.50	13:30	7	LUBRICATE RIG	Rig service
13:30	5.00	18:30	2	DRILL ACTUAL	Drig 179-317'.
18:30	0.50	19:00	7	LUBRICATE RIG	Rig service
19:00	11.00	06:00	2	DRILL ACTUAL	Drig 317-997'. Survey @ 895' .42 inc 259 az. MW 8.6+#/gal 39 vis

**4-5D-45 BTR 3/12/2013 06:00 - 3/13/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.50	02:30	2	DRILL ACTUAL	Drill 997' - 2083'.
02:30	3.50	06:00	21	OPEN	Took gas kick, circulated pits & weight up to 9.5 ppg. Gas bubble to surface @ 05:00, flash fire on floor. Drill line parted @ 05:15, dropped top drive to floor. @ 06:00 circulating 9.5 kill mud @ 110 strokes, 1200 psi.

**4-5D-45 BTR 3/13/2013 06:00 - 3/14/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 9.5 ppg, 46 vis until 23:00, raised mw to 9.8 ppg. BBC and Nabors safety standdown, planning for remedial action.

**4-5D-45 BTR 3/14/2013 06:00 - 3/15/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Fire marshall inspected rig. Rigged up 500 ton crane, pulled catwalk out of way.

**4-5D-45 BTR 3/15/2013 06:00 - 3/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.00	19:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Put counterweights on crane, tied on to top drive. Flow check, pull top drive up and set slips. Cut drilling line and tie off, remove blocks. Establish PIR (1 bpm-41 psi;2 bpm-60 psi;3 bpm-143 psi).
19:00	2.50	21:30	21	OPEN	R/U DCT wireline, perforate HWDP @ 1666'.
21:30	6.00	03:30	5	COND MUD & CIRC	C&C hole/wait on cement.

**4-5D-45 BTR 3/16/2013 06:00 - 3/17/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	5	COND MUD & CIRC	Circulate well @ 70 strokes, 725 psi/wait on cement.
12:00	2.00	14:00	17	PLUG BACK	HSM. R/U HES. Pressure test to 3000 psi, pump 30 bbls tuned lite spacer @ 10.5 ppg, 4.15 yld, 27.82 gps H2O. Mix and pump 610 sx(247 bbls) tuned light cement @ 11 ppg, 2.28 yld, 10.48 gps H2O @ 4 bpm. Pump 3.5 bbls to clear lines. Full returns, max pressure 400 psi. Returned 25 bbls cmt to surface. Cement fell 6" in 45 minutes. Drained and flushed conductor. Cement job witnessed and okayed by Glade Rich of Vernal BLM.
14:00	16.00	06:00	13	WAIT ON CEMENT	Wait on cement. Checked cmt @ 23:00, too soft to cut off.

**4-5D-45 BTR 3/17/2013 06:00 - 3/18/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	13	WAIT ON CEMENT	WOC. Repair rig.
10:00	6.00	16:00	21	OPEN	Used gas sniffer on DP and conductor, no indications of gas. Cut on conductor, Gas indications up through cement. Cut off conductor and DP, weld 1/2" plate w/2" 3000# ball valve on top of conductor. Well contained, BLM and State contacted.
16:00	14.00	06:00	8	REPAIR RIG	Removed and replaced top drive, blocks, ST-80 iron roughneck. Drawworks readied for removal.

**4-5D-45 BTR 3/18/2013 06:00 - 3/19/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Set rotary table on floor, move crane. Remove & replace drawworks. Set walking system with crane.

**4-5D-45 BTR 3/19/2013 06:00 - 3/20/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Had to remove DW (wrong style), wait on replacement. Install new DW. Finish setting walking system. Rearranged housing to accomodate skid. Replace and repair electric and hydraulic components.

**4-5D-45 BTR 3/20/2013 06:00 - 3/21/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Continue installation of DW, rotary table, various components. Walked rig 30' east removed matting boards, mark new hole w/Uintah Engineering.

**4-5D-45 BTR 3/21/2013 06:00 - 3/22/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Repair rig. Modify DW skid, hook up and test same. Mechanics and electricians hook up, troubleshoot, and test components. Walked rig back another 20', remove matting board so cellar ring would fit.

**4-5D-45 BTR 3/22/2013 06:00 - 3/23/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	12.00	18:00	8	REPAIR RIG	Install new chips in topdrive, test same. Walked rig back over well. Install I-BOP, saver sub. Rig 100% repaired.
18:00	12.00	06:00	14	NIPPLE UP B.O.P	Fabricated riser, weld on casing wiper bowl. HSM with all personnel, Well cap vented, cut conductor off.

**4-5D-45 BTR 3/23/2013 06:00 - 3/24/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	14	NIPPLE UP B.O.P	Did not get conductor cut off, too much gas. Cameron cut csg w/air saw. NU drilling spool, annular, riser. Welded (2)6" support I-beams to csg on cellar bottom. Hook up flow line, choke line to HCR valve, put blooie line together to flare box. Rig up floor.

**4-5D-45 BTR 3/24/2013 06:00 - 3/25/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	21.00	03:00	14	NIPPLE UP B.O.P	Clean area; remove tubulars off location to relocate flare box. Weld and fabricate blooie lines, vent line to flare box. Debug pumps, ST-80 iron roughneck, hydraulic leaks.
03:00	3.00	06:00	21	OPEN	HSM w/all personnel; operational procedure to wash over DP. Troubleshoot hydraulic leaks & electrical faults, catwalk problems.

**4-5D-45 BTR 3/25/2013 06:00 - 3/26/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	19	FISHING	PU 2 jts 8.125" WP & start washover 4 1/2" DP. Washover to 56', acted like milling on tool jt. X/O mills, won't mill off. Toh, determined to be beside DP. Drain stack, guide shoe over DP, resume washover. Wash f/25' - 340'. Cement had no integrity until 250', spotty from there to 340'. Rig Service. Safety meeting - first day back.

**4-5D-45 BTR 3/26/2013 06:00 - 3/27/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.50	10:30	19	FISHING	Wash over DP 340' - 429'. Cement spotty, short intervals(2'-15') hard, mostly soft. MW - 9.8 ppg, vis 40 spq.
10:30	0.50	11:00	7	LUBRICATE RIG	Rig service. Check COM.
11:00	6.50	17:30	19	FISHING	Wash over DP 429' - 684'. Wob 3-5k. Cmt firmer, still green. Intermittent gas, 2767 units highest. Venting through gas buster, no flare. MW - 9.8 ppg, vis 39 spq.
17:30	1.50	19:00	5	COND MUD & CIRC	C&C mud, raise mw to 10 ppg.
19:00	3.00	22:00	6	TRIPS	Toh, stand WP in derrick. No drag, hole filled properly.
22:00	8.00	06:00	6	TRIPS	PU 10" mill shoe, 12 jts 10" WP, wash in hole. Tih washing 8.125 and 7.625 WP. Safety meeting - housekeeping.

**4-5D-45 BTR 3/27/2013 06:00 - 3/28/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	6	TRIPS	Wash to bottom. Hole clean.
09:00	7.00	16:00	19	FISHING	Wash over fish 684' - 1058'. Cement firm but still green.
16:00	1.00	17:00	5	COND MUD & CIRC	C&C mud.
17:00	5.00	22:00	6	TRIPS	LD WP. Hole clean, filled properly, no drag.
22:00	1.00	23:00	19	FISHING	PU overshot, grapple, packoff, latch on to DP.
23:00	7.00	06:00	19	FISHING	Remove Pragma and clean catwalk area. RU crane, Cudd. Transfer mud from shaker pits to suction pits, clean same, fill with 9.5# brine.

**4-5D-45 BTR 3/28/2013 06:00 - 3/29/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	19	FISHING	Supersuck shaker pits, fill w/200 bbls 10# brine, cut back to 9.5#.
09:00	6.00	15:00	19	FISHING	Wait on X-overs
15:00	2.00	17:00	19	FISHING	Release overshot from fish top. Laydown 5 3/4" washpipe subs and over shot. P/U 8 1/8" overshot and 4.5" 16.6# Drill pipe subs Engage fish. Pull 5K over string. Set slips and put CTU back on well.
17:00	12.00	05:00	19	FISHING	Est pump rate of .9 bpm @ 4200#. RIH drill cmt to 739'. Well flowing over conductor. Discovered plugged flowline causing returns to back up. Cleaned out flowline and resumed drilling. Fell thru cmt @ 1675'. RIH to 1950. Clrc clean and POH.
05:00	1.00	06:00	19	FISHING	Toh w/coiled tubing.

**4-5D-45 BTR 3/29/2013 06:00 - 3/30/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status DRILLING	Total Depth (ftKB) 0.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	19	FISHING	Finish POH coil tbg and rig down. Set Pragma and catwalk in. Rig up wireline and RIH to freepoint. Pulled off of fish top. POH wireline. Redress overshot and get on fish again. Pickup 2 6" drill collars with bumper sub and work overshot down on fishtop. Pick up to 95000# several times.
16:00	8.00	00:00	19	FISHING	Rig up Wireline and run freepoint. Pipe free @ 1016', 1047' 50% stuck @ 1229'. Run backoff @ 1016' Backoff successful. POH wireline.
00:00	3.50	03:30	19	FISHING	Circulate brine out of hole. Circulate and condition mud.
03:30	2.50	06:00	19	FISHING	Fill trip tanks. Do flow check. HSM Pull up and L/D overshot and TOH.



BLM - Vernal Field Office - Notification Form

Operator Bill Barrett Corp Rig Name/# Nabors M22  
Submitted By Pat Clark Phone Number 303-353-5350  
Well Name/Number 4-5D-45 BTR  
Qtr/Qtr NW/NW Section 5 Township 4S Range 5W  
Lease Serial Number 1420H626261  
API Number 43-013-51242

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing  
☐ Intermediate Casing  
☒ Production Casing  
☐ Liner  
☐ Other

Date/Time 4/14/2013 7:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point  
☐ BOPE test at intermediate casing point  
☐ 30 day BOPE test  
☐ Other

RECEIVED

APR 13 2013

DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM ☐ PM ☐

Remarks Times are estimated

—

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR	
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>9. API NUMBER:</b> 43013512420000
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 312-8164 Ext	<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/30/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Attached is the April 2013 Drilling Activity for this well.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 May 03, 2013

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 5/3/2013

**4-5D-45 BTR 4/1/2013 06:00 - 4/2/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	19	FISHING	Run Free Point ( DCT Wireline Co.) Pipe Free to 1514' - Run String Shot & Back- off @ 1356' ( Washed Over To 1389' ) POH R/D Wireline.
10:00	2.50	12:30	19	FISHING	TOH W/ Fish ( 366' ) - Pump Thru & Flush Fish - L/D Screw In Sub & Top Jt Of Fish And Joint Shot At Btm Of Fish.
12:30	3.00	15:30	19	FISHING	M/U 9.0" O.D Shoe & 8 1/8" Wash pipe - 7 5/8 " WP Assy - TIH
15:30	0.50	16:00	7	LUBRICATE RIG	Rig Service.
16:00	14.00	06:00	19	FISHING	Tag @ 1090' - Wash to Top Of Cement @ 1389' - Wash Over Fish F/ 1389' To 1492' ( 103' ). Raised Visc f/ 40 to 50 Sec/ Qt. - No Mud Lost To Date.

**4-5D-45 BTR 4/2/2013 06:00 - 4/3/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	19.00	01:00	19	FISHING	Wash Over Fish F/ 1492' to 1655' ( 163' ) Fell Thru Cement @ 1655'.
01:00	0.50	01:30	5	COND MUD & CIRC	Circ & Evaluate Wellbore Conditions - No Mud Gain Or Loss, No Increase In Gas ( 65 u ) All Things Stable As Before.
01:30	4.50	06:00	19	FISHING	Continue To Wash Over Fish f/ 1655' To 1820' ( 165' ). Taking Wt Periodically To Mill Off. Conditioning Mud & Evaluating All Parameters. NO MUD LOSS TO DATE..

**4-5D-45 BTR 4/3/2013 06:00 - 4/4/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.50	09:30	19	FISHING	Wash Over Fish in 12 1/4" Open Hole Annulus w/ 9.0" O.D. Shoe From 1820' to 1944' ( 124' ).
09:30	0.50	10:00	5	COND MUD & CIRC	C&C mud.
10:00	3.00	13:00	6	TRIPS	TOH. LDWP.
13:00	1.50	14:30	6	TRIPS	PU skirted screw-in sub, TIH to 1350'.
14:30	0.50	15:00	5	COND MUD & CIRC	Circulate BU.
15:00	6.00	21:00	19	FISHING	Screw in to fish, can't fully torque up, fish is turning. PU 110k on string, fish is free. TOH, backream f/1944' - 1674' past cmt.
21:00	6.00	03:00	19	FISHING	LD fishing tools, remainder of fish. Run pipe in derrick in hole, and lay down. Hole filled correctly, no loss, no gas.
03:00	0.50	03:30	7	LUBRICATE RIG	Rig Service.
03:30	2.50	06:00	6	TRIPS	PU 8" MM, dialed to straight. Racked & strapped 9 6.5" DCs, 27 4.5" HWDP.

**4-5D-45 BTR 4/4/2013 06:00 - 4/5/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	3	REAMING	PU BHA, DP, clean hole out f/1200' - 2083'. Easy washing, some formation and cement. 1150-1200 psi @ 594 gpm.
12:00	1.00	13:00	5	COND MUD & CIRC	C&C, pump 2 25 bbl sweeps 20 minutes apart. Sent recovered fish to CSI for cleaning and inspection.
13:00	4.50	17:30	2	DRILL ACTUAL	Drill 2083' - 2170'. 594 gpm, spp 1450 psi, dp 200 psi, rop 20 fph. Hole torque in spots, no losses, no gas.
17:30	0.50	18:00	7	LUBRICATE RIG	Rig service. Check COM.
18:00	3.00	21:00	2	DRILL ACTUAL	Drill 2170' - 2292'. 594 gpm, spp 1450 psi, dp 175 psi, rop 41 fph.
21:00	1.00	22:00	5	COND MUD & CIRC	C&C mud, run 2 sweeps. Pump pill.
22:00	2.50	00:30	6	TRIPS	Toh. Hole in good shape, took correct amount of fill, no losses, no gas.
00:30	5.50	06:00	12	RUN CASING & CEMENT	RU casers, run 9 5/8", 36#, J-55, LT&C csg as follows: GS, 1 jt csg, FC, 51 jts csg. Bow spring centralizers - 1 - 10' from shoe, top of jts 2 and 4, every other jt to 2072'.

**4-5D-45 BTR 4/5/2013 06:00 - 4/6/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	5	COND MUD & CIRC	Install rot rubber, C&C mud f/cmt.
09:00	2.50	11:30	12	RUN CASING & CEMENT	HSM. Cement surface csg as follows: Pump 20 bbls H2O, 40 bbls superflush, 20 bbls H2O. Mix and pump 340 sx(167.7 bbls) Halcem lead cmt @ 11.8 ppg, 2.77 yld, 16.67 gps H2O. Mix and pump 385 sx(165.5 bbls) Halcem tail cmt @ 14.8 ppg, 1.37 yld, 6.62 gps H2O. Wash lines, drop top plug, displace w/173.5 bbls mud(last 20 bbls H2O to clean lines. Max pressure 950 psi, bump plug to 1506 psi, floats held. Full returns, 97 bbls cmt to surf, no gas. Job witnessed by Ray Arnold of Vernal BLM.
11:30	6.50	18:00	13	WAIT ON CEMENT	Cement set too quickly to 1", wait 6.5 hrs to relax pipe and cut off. Cement very hard. Agreed upon by Ray Arnold.
18:00	12.00	06:00	21	OPEN	ND riser, annular, cut csg off, clean pits. Riser full of hard cement.

**4-5D-45 BTR 4/6/2013 06:00 - 4/7/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	21	OPEN	Weld on csg head. 3" double male cam-lock w/3" steel nipple dropped in hole while sucking out casing
10:00	2.00	12:00	21	OPEN	Install new Pason depth tracker box and cord on crown.
12:00	5.00	17:00	15	TEST B.O.P	HSM. Test lower kelly, safety, dart valves, pipe & blind rams, choke line, manifold valves, kill line valve, check valve, hcr to 5000 psi high, 250 psi low f/10 min. Test Hydrill to 2500 psi high, 250 psi low f/10 min. Test surface csg to 1500 psi f/30 min. Perform koomey function test. Test witnessed by Randy Bywater of Vernal NLM.
17:00	5.00	22:00	21	OPEN	Install wear bushing, rot head and flowline.
22:00	2.50	00:30	6	TRIPS	Tih w/mill tooth bit, junk sub.
00:30	5.50	06:00	21	OPEN	Tag junk @ 2239', rot @ 60 - 75 rpm, 15k - 30 wob. Stroke junk sub, run high-vis sweeps. Drill to 2241', drilled junk, wiper plug, part of float collar.

**4-5D-45 BTR 4/7/2013 06:00 - 4/8/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	6	TRIPS	Toh.
08:30	2.00	10:30	20	DIRECTIONAL WORK	PU dir BHA.
10:30	2.00	12:30	6	TRIPS	Tih.
12:30	3.50	16:00	21	OPEN	Drill flt equip, cmt, 18' new hole to 2310'. FC @ 2245', FS @ 2290'.
16:00	0.50	16:30	21	OPEN	Spot high-vis LCM pill @ shoe. FIT to 255 psi for a 10.5 ppg EMW.
16:30	2.00	18:30	2	DRILL ACTUAL	Steerable drlg 2310' - 2327'. Torque, low differential pressure, won't drill.
18:30	2.50	21:00	6	TRIPS	Pump pill. Toh. BOP drill - 50 sec.
21:00	2.50	23:30	6	TRIPS	X/O Bit, MM. Tih.
23:30	0.50	00:00	7	LUBRICATE RIG	Rig Service.
00:00	1.00	01:00	2	DRILL ACTUAL	Drill 2327' - 2389'.
01:00	5.00	06:00	8	REPAIR RIG	Repair top drive brakes.

**4-5D-45 BTR 4/8/2013 06:00 - 4/9/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.50	09:30	2	DRILL ACTUAL	Steerable drlg 2389' - 2642'. wob 15k, spp 1650 psi, dp 200 psi, rpm 51/83, rop 72 fph.
09:30	0.50	10:00	7	LUBRICATE RIG	Rig Service.
10:00	5.00	15:00	2	DRILL ACTUAL	Steerable drlg 2642' - 3116'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 95 fph. BOP Drill - 45 seconds.
15:00	0.50	15:30	8	REPAIR RIG	Repair SCR house.
15:30	9.50	01:00	2	DRILL ACTUAL	Steerable drlg 3116' - 3780'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 70 fph.
01:00	0.50	01:30	7	LUBRICATE RIG	Rig Service.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
01:30	4.50	06:00	2	DRILL ACTUAL	Steerable drlg 3780' - 4096'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 70 fph.

**4-5D-45 BTR 4/9/2013 06:00 - 4/10/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	5.00	11:00	2	DRILL ACTUAL	Steerable drlg 4096' - 4441'. wob 15 - 20k, rpm 58/83, spp 2250 psi, dp 250 psi, rop 69 fph.
11:00	0.50	11:30	7	LUBRICATE RIG	Rig Service. Check COM.
11:30	13.00	00:30	2	DRILL ACTUAL	Steerable drlg 4441' - 5294'. wob 15k, rpm 58/83, spp 2450 psi, dp 250 psi, rop 66 fph.
00:30	1.00	01:30	7	LUBRICATE RIG	Rig service. Replace gripper dies.
01:30	4.50	06:00	2	DRILL ACTUAL	Steerable drlg 5294' - 5548'. wob 15k, rpm 51/65, spp 1850 psi, dp 200 psi, rop 56 fph.

**4-5D-45 BTR 4/10/2013 06:00 - 4/11/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	Steerable drlg 5548' - 6146'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 60 fph. Lost 30 bbls mud. Start adding DAP to mud.
16:00	0.50	16:30	7	LUBRICATE RIG	Rig Service.
16:30	9.50	02:00	2	DRILL ACTUAL	Steerable drlg 6146' - 6715'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 60 fph. Lost 60 bbls mud.
02:00	0.50	02:30	7	LUBRICATE RIG	Rig Service.
02:30	3.50	06:00	2	DRILL ACTUAL	Steerable drlg 6715' - 6937'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 63 fph. Lost 30 bbls mud. DAP @ 1.9 ppb.

**4-5D-45 BTR 4/11/2013 06:00 - 4/12/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	2	DRILL ACTUAL	Steerable drlg 6937' - 6949'. Lost returns.
06:30	2.50	09:00	5	COND MUD & CIRC	C&C mud, pump lcm sweeps, bypass shakers, raise lcm content to 10%. Build volume, Lost 300 bbls.
09:00	5.00	14:00	2	DRILL ACTUAL	Steerable drlg 6949' - 7189'. wob 18k, rpm 55/68, spp 2250 psi, dp 250 psi, rop 48 fph. Put mud back over shakers once reamers past loss zone.
14:00	0.50	14:30	7	LUBRICATE RIG	Rig Service. BOP Drill - 55 seconds.
14:30	15.00	05:30	2	DRILL ACTUAL	Steerable drlg 7189' - 7760'. wob 20k, rpm 55/68, spp 2250 psi, dp 250 psi, rop 38 fph.
05:30	0.50	06:00	7	LUBRICATE RIG	Rig Service.

**4-5D-45 BTR 4/12/2013 06:00 - 4/13/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	8.00	14:00	2	DRILL ACTUAL	Steerable drlg 7760' - 8233'. Wob 22k, rpm 55/68, spp 2500 psi, dp 250 psi, rop 59 fph.
14:00	0.50	14:30	7	LUBRICATE RIG	Rig Service.
14:30	12.50	03:00	2	DRILL ACTUAL	Steerable drlg 8233' - 8709'. Wob 22k, rpm 45-55/68, spp 2350 psi, dp 250 psi, rop 38 fph.
03:00	0.50	03:30	7	LUBRICATE RIG	Rig Service.
03:30	2.50	06:00	2	DRILL ACTUAL	Steerable drlg 8709' - 8868'. Wob 22k, rpm 55/68, spp 2200 psi, dp 200 psi, rop 64 fph. TD Well @ 8868'.

**4-5D-45 BTR 4/13/2013 06:00 - 4/14/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.50	07:30	5	COND MUD & CIRC	C&C mud f/wiper trip. Pump 2 high-vis lcm sweeps, circ BU.
07:30	9.00	16:30	6	TRIPS	HSM, check flow. Wiper trip to shoe. Trip went smooth, hole in good shape, took correct amount of fluid. Had to wash past 8050' and 8450', easy washing.
16:30	2.00	18:30	5	COND MUD & CIRC	C&C hole f/logs. Circulate out gas, had 25' flare on bottoms up. Pump pill.
18:30	7.50	02:00	6	TRIPS	Toh. LD dir tools.
02:00	0.50	02:30	11	WIRELINE LOGS	HSM. RU loggers.
02:30	2.50	05:00	8	REPAIR RIG	Halliburton cmt bulk truck hit fuel rail, caused rig to run out of fuel and black out. Got rig running, fixed faults in drawworks, top drive.
05:00	1.00	06:00	11	WIRELINE LOGS	Tih w/logs.

**4-5D-45 BTR 4/14/2013 06:00 - 4/15/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	11	WIRELINE LOGS	Log well - ran Dual Lateralog, Spectral Density, Dual Spaced Neutron, Gamma, Sonic Array, Micro Spherically Focused log. Logger's TD - 8857'. RD loggers.
10:00	2.00	12:00	6	TRIPS	PU bit, bit sub, T.I.H. F/0' T/1106'
12:00	0.50	12:30	9	CUT OFF DRILL LINE	CUT & SLIP 75' (11 WRAPS) DRILL LINE
12:30	4.50	17:00	6	TRIPS	T.I.H. F/1106' T/8868'
17:00	3.00	20:00	5	COND MUD & CIRC	CIRC- LOST RETURNS - PUMP 25% LCM SWEEP BUILD VOLUME BYPASS SHAKERS & BRING LCM CONTENT TO 15%
20:00	0.50	20:30	6	TRIPS	PULL 10 STANDS
20:30	2.50	23:00	5	COND MUD & CIRC	BUILD VOLUME & BRING LCM CONTENT TO 25%
23:00	1.00	00:00	6	TRIPS	STAGE IN THE HOLE REAM BRIDGES @ 8018' & 8500'
00:00	4.00	04:00	5	COND MUD & CIRC	PUMP HIGH VIS/LCM SWEEP - CIRC B/U - 2500-4000 UNITS BACKGROUND GAS WHILE ON GAS BUSTER - RAISE MUD WT FROM 9.8 PPG TO 10.1 PPG
04:00	0.50	04:30	6	TRIPS	FLOW CHECK - L/D DRILL PIPE FROM 8868' T/8868'
04:30	1.50	06:00	8	REPAIR RIG	DOWNTIME DUE TO STARTER MOTOR ON PRAGMA - WAITING ON LAYDOWN TRUCK & CREW

**4-5D-45 BTR 4/15/2013 06:00 - 4/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	8	REPAIR RIG	WAITING ON LAY DOWN TRUCK (PRAGMA BROKE DOWN)
08:30	0.50	09:00	7	LUBRICATE RIG	RIG SERVICE
09:00	8.50	17:30	6	TRIPS	L/D DRILL PIPE, HWDP, & 6" DCs
17:30	0.50	18:00	21	OPEN	PULL WEAR BUSHING
18:00	1.00	19:00	8	REPAIR RIG	R/D LAY DOWN TRUCK - REPLACE STARTER MOTOR ON PRAGMA
19:00	10.50	05:30	12	RUN CASING & CEMENT	S/M - R/U CSG CREW & RUN 200 JOINTS 5.5" 17# P-110 CSG W/60 CENTRALIZERS & 3 MARKER JOINTS - CSG SET @ 8858'
05:30	0.50	06:00	5	COND MUD & CIRC	CIRC - R/D CSG CREW

**4-5D-45 BTR 4/16/2013 06:00 - 4/16/2013 22:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	5	COND MUD & CIRC	CIRC B/U WHILE RIGGING UP CEMENTERS
08:30	4.00	12:30	12	RUN CASING & CEMENT	TEST LINES @ 5000 PSI, PUMP 10 BBLS WATER, 40 BBLS SUPER FLUSH, 10 BBLS WATER, 297 BBLS 720 SKS 11 PPG 2.32 YIELD LEAD CEMENT MIXED @ 10.61, 162 BBLS 635 SKS 13.5 PPG 1.43 YIELD TAIL CEMENT MIXED @ 6.65 GAL/SK, SHUT DOWN WASH LINES & DROP PLUG, DISPLACE WITH 204 BBLS CLAYWEB WATER LAND PLUG @ 1666 PSI TAKE PRESSURE 500 PSI OVER FCP & HOLD FOR 2 MIN - RELEASE PRESSURE FLOATS HELD - FULL RETURNS DURING JOB - 73 BBLS CEMENT TO SURFACE - R/D CEMENTERS
12:30	1.50	14:00	14	NIPPLE DOWN B.O.P	NIPPLE DOWN BOP
14:00	1.00	15:00	21	OPEN	SET CSG SLIPS @ 180K - CUT OFF CSG



**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
15:00	7.00	22:00	21	OPEN	CLEAN MUD TANKS - RIGGING WITH CREWS - RIG RELEASED @ 2200 HRS

**4-5D-45 BTR 4/22/2013 06:00 - 4/23/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.
10:00	2.00	12:00	IWHD	Install Wellhead	Safety Meeting With Cameron, Check Surface Casing & 5.5" For Pressure, 0 Psi On Both Sides. N/D 11" Night Cap, Cleaned And Dressed Up 5.5" Csg Top, Set And N/U 11" x 7 1/16" 5k Tbg. Head With 2 1/16" x 5k Gate Valves. Tested Hanger Seals To 7100 Psi, Good Test. Secured Well Head With 7" 5K Night Cap.
12:00	18.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.

**4-5D-45 BTR 4/23/2013 06:00 - 4/24/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status COMPLETION	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.00	08:00	LOCL	Lock Wellhead & Secure	WSI Shut In And Secured.
08:00	1.50	09:30	SRIG	Rig Up/Down	MIRU SLB W/L Crew And Equipment. Hold Safety Meeting. Rig Up Gauge Ring And Logging Tool.
09:30	5.50	15:00	LOGG	Logging	P/U Junk Basket/Gauge Ring. RIH, Tagged Up At 8,737', Drilling Report Shows FC At 8,767', 30' Of Fill. POOH, P/U CBL Tool, Rih To PBTD, 8,737', Correlating To HES Spectral Density/ Dual Spaced Neutron Dated 04-14-2013. Run Repeat Section From 8,737 - 8,500', Log Up Hole. Showed Good Bond From TD To 5,400, 5,400 - 4,800' Fair, 4,800 - 2,720 Ratty. TOC 2,720'. Found Short Joints At 8,280 - 8,302, 7,688 - 7,710', And 6,314 - 6,336'. Ran With Pressure. Pooh, RD Equipment, MOL.
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000
<b>PHONE NUMBER:</b> 303 312-8134 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/21/2013	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This well received first production on 5/21/2013, first gas sales on 5/22/2013 and first oil sales on 5/25/2013.		
<b>Accepted by the          Utah Division of          Oil, Gas and Mining          FOR RECORD ONLY          May 28, 2013</b>		
<b>NAME (PLEASE PRINT)</b> Venessa Langmacher	<b>PHONE NUMBER</b> 303 312-8172	<b>TITLE</b> Senior Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/28/2013	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> 1420H626261
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Uintah
<b>2. NAME OF OPERATOR:</b> BILL BARRETT CORP		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1099 18th Street Ste 2300 , Denver, CO, 80202		<b>8. WELL NAME and NUMBER:</b> 4-5D-45 BTR
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0755 FNL 1292 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 05 Township: 04.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013512420000
<b>PHONE NUMBER:</b> 303 312-8134 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/31/2013	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 Attached is the May 2013 Drilling Activity for this well.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 June 06, 2013

<b>NAME (PLEASE PRINT)</b> Brady Riley	<b>PHONE NUMBER</b> 303 312-8115	<b>TITLE</b> Permit Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/5/2013	

**4-5D-45 BTR 5/15/2013 06:00 - 5/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FRAC LINE SET. FILLING FRAC LINE. FB TANKS SET. FB EQUIP PLUMBED IN.

**4-5D-45 BTR 5/16/2013 06:00 - 5/17/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	JSA. CHECK PRESSURE. ND 7" NIGHT CAP. NU FRAC MANDREL, 5" 10K FRAC VALVES, AND FRAC HEAD. PRES TEST CSG, VALVES, AND FB EQUIP. CONT FILLING FRAC LINE.

**4-5D-45 BTR 5/17/2013 06:00 - 5/18/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FINISH FILLING FRAC LINE. HEAT FRAC LINE.

**4-5D-45 BTR 5/18/2013 06:00 - 5/19/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL
07:00	1.00	08:00	SRIG	Rig Up/Down	HSM. MIRU SLB WITH 5K LUBE.
08:00	1.00	09:00	PFRT	Perforating	PU GUNS FOR STG 1. RIH AND CORRELATE TO SJ AT 8280'-8302'. RUN DOWN AND PERF CR-4, CR-4A, AND CR-5 FORM 8405'-8668' WITH 39 HOLES IN 13' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT WELL IN.
09:00	6.00	15:00	SRIG	Rig Up/Down	MIRU HES FRAC FLEET.
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

**4-5D-45 BTR 5/19/2013 06:00 - 5/20/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00		06:00	SMTG	Safety Meeting	HES AOL 03:45. STRAP TANKS, PRIME UP CHEMS AND PUMPS, HSM- RED ZONE, PPE, EMERGENCY PLAN, PARKING.

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00		06:00	FRAC	Frac. Job	<p>FRAC STG #1- CR-4, CR-4A, AND CR-5 PERFS 8405'-8668' 39 HOLES IN 13' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 570 PSI AT 04:41 BREAK DOWN 3961 PSI AT 9.5 BPM. PMP 3900 GAL 15% HCL ACID W/ 78 BIO BALLS FOR DIVERSION. 10.4 BPM AT 2703 PSI. FLUSH W/ 8206 GAL. 30.5 BPM AT 3422 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4800 PSI. ISDP 2553. FG .74. PERFS OPEN 30/39. CONT FR PAD. 70.1 BPM AT 4400 PSI. (34/39 P/O) STAGE HYBOR PAD 70.5 BPM AT 4545 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.0 BPM AT 4778 PSI. ON PERFS 70.2 BPM AT 4457 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.0 BPM AT 4096 PSI. ON PERFS 70.2 BPM AT 3869 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.3 BPM AT 3735 PSI. ON PERFS 70.3 BPM AT 3650 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 3670 PSI. ON PERFS 70.2 BPM AT 3662 PSI. FLUSH 70.8 BPM AT 4045 PSI. WSI WITH 2651 PSI. TURN OVER TO WIRELIN.</p> <p>ISIP 2697                                      FG .75 MAX RATE 70.5 BPM                          MAX PRES 4788 PSI AVE RATE 70.2 BPM                          AVE PRES 3953 PSI PMP 150,000 LBS 20/40 WHITE.        250 LBS SCALE SORB 3 SLK WTR 66,077 GAL                      20# HYBOR G (16) 62,095 GAL CLEAN FLUID 132,109 GAL                   BWTR 3145 BBLS</p>
06:00	1.09	07:05	PFRT	Perforating	<p>PERF STG #2- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 2 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 8280'-8302'. RUN DOWN AND SET CBP AT 8394' WITH 2450 PSI. PULL UP AND PERF CR-3 AND CR-4 FORM 8147'-8374' WITH 36 HOLES IN 12' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 2400 PSI.</p>
07:05	1.25	08:20	FRAC	Frac. Job	<p>FRAC STG #2- CR-3, AND CR-4 PERFS 8147'-8374' 36 HOLES IN 12' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 2378 PSI AT 07:15 BREAK DOWN 2980 PSI AT 9.8 BPM. PMP 3600 GAL 15% HCL ACID W/ 72 BIO BALLS FOR DIVERSION. 10.1 BPM AT 2810 PSI. FLUSH W/ 7955 GAL. 30.0 BPM AT 3525 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4818 PSI. ISDP 2516. FG .74. PERFS OPEN 29/36. CONT FR PAD. 70.4 BPM AT 4710 PSI. STAGE HYBOR PAD 70.0 BPM AT 4818 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 4778 PSI. ON PERFS 70.2 BPM AT 4052 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.3 BPM AT 3908 PSI. ON PERFS 70.3 BPM AT 3814 PSI. ON 3# HAD A PUMP DOWN SHIFT (NOT SURE WHY) BRING RATE BACK UP THEN NET PRESSURES STARTED CLIMBING FAST. EXTENDED 3# THEN WENT TO FLUSH. FLUSH 70.9 BPM AT 4346 PSI. WSI WITH 2655 PSI. TURN OVER TO WIRELIN.</p> <p>ISIP 2663                                      FG .76 MAX RATE 70.5 BPM                          MAX PRES 4823 PSI AVE RATE 70.0 BPM                          AVE PRES 4068 PSI PMP 95,900 LBS 20/40 WHITE.        250 LBS SCALE SORB 3 SLK WTR 65,449 GAL                      20# HYBOR G (16) 49,163 GAL CLEAN FLUID 118,146 GAL                   BWTR 2813 BBLS</p>
08:20	1.25	09:35	PFRT	Perforating	<p>PERF STG #3- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 3 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7687'-7710'. RUN DOWN AND SET CBP AT 8138' WITH 2400 PSI. PULL UP AND PERF CR-2 AND CR-3 FORM 7887'-8118' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 2400 PSI.</p>

Start Time	Dur (hr)	End Time	Code	Category	Com
09:35	1.25	10:50	FRAC	Frac. Job	<p>FRAC STG #3- CR-2 AND CR-3 PERFS 7887'-8118' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 2332 PSI AT 09:40 BREAK DOWN 2960 PSI AT 9.9 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 2553 PSI. FLUSH W/ 7724 GAL. 30.1 BPM AT 3311 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4524 PSI. ISDP 2449. FG .74. PERFS OPEN 31/45. CONT FR PAD. 70.3 BPM AT 4305 PSI. STAGE HYBOR PAD 70.0 BPM AT 4416 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.0 BPM AT 4437 PSI. ON PERFS 70.1 BPM AT 4060 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.2 BPM AT 3946 PSI. ON PERFS 70.2 BPM AT 3791 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 3725 PSI. ON PERFS 70.2 BPM AT 3645 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 3639 PSI. ON PERFS 70.2 BPM AT 3583 PSI. FLUSH 70.6 BPM AT 4075 PSI. WSI WITH 2750 PSI. TURN OVER TO WIRELINE.</p> <p>ISIP 2753    FG .78 MAX RATE 70.4 BPM                              MAX PRES 4444 PSI AVE RATE 70.2 BPM                              AVE PRES 3840 PSI PMP 149,900 LBS 20/40 WHITE.                250 LBS SCALE SORB 3 SLK WTR 65,045 GAL                             20# HYBOR G (16) 62,115 GAL CLEAN FLUID 131,072 GAL                       BWTR 3121 BBLS</p>
10:50	1.16	12:00	PFRT	Perforating	<p>PERF STG #4- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 4 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7687'-7710'. RUN DOWN AND SET CBP AT 7868' WITH 2400 PSI. PULL UP AND PERF WASATCH AND CR-2 FORM 7625'-7848' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 1150 PSI.</p>
12:00	1.34	13:20	FRAC	Frac. Job	<p>FRAC STG #4- WASATCH AND CR-2 PERFS 7625'-7848' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 893 PSI AT 12:10 BREAK DOWN 2264 PSI AT 9.7 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.3 BPM AT 2182 PSI. FLUSH W/ 7445 GAL. 30.2 BPM AT 2981 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 3910 PSI. ISDP 1891. FG .68. PERFS OPEN 31/45. CONT FR PAD. 70.4 BPM AT 3613 PSI. (35/45 P/O) STAGE HYBOR PAD 70.0 BPM AT 3630 PSI. STAGE TO 2 PPA 20/40 WHITE. 69.8 BPM AT 3652 PSI. ON PERFS 70.1 BPM AT 3331 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 3237 PSI. ON PERFS 70.2 BPM AT 3054 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.0 BPM AT 3004 PSI. ON PERFS 70.1 BPM AT 2956 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2951 PSI. ON PERFS 70.1 BPM AT 2905 PSI. FLUSH 70.1 BPM AT 3501 PSI. WSI WITH 2250 PSI. TURN OVER TO WIRELINE.</p> <p>ISIP 2244    FG .73 MAX RATE 70.5 BPM                              MAX PRES 3680 PSI AVE RATE 70.1 BPM                              AVE PRES 3108 PSI PMP 149,900 LBS 20/40 WHITE.                250 LBS SCALE SORB 3 SLK WTR 60,830 GAL                             20# HYBOR G (16) 62,111 GAL CLEAN FLUID 126,879 GAL                       BWTR 3021 BBLS</p>
13:20	1.25	14:35	PFRT	Perforating	<p>PERF STG #5- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 5 INTO LUB AND EQUALIZE 2000 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. RUN DOWN AND SET CBP AT 7620' WITH 1700 PSI. PULL UP AND PERF CR-1 FORM 7377'-7601' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 1600 PSI.</p>



Start Time	Dur (hr)	End Time	Code	Category	Com
14:35	1.41	16:00	FRAC	Frac. Job	<p>FRAC STG #5- CR-1 PERFS 7377'-7601' 45 HOLES IN 15' NET.            PRESSURE TEST LINES TO 9200 PSI.            OPEN WELL W/ 1360 PSI AT 14:40            BREAK DOWN 1825 PSI AT 9.8 BPM.            PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 1739 PSI.            FLUSH W/ 7202 GAL. 30.4 BPM AT 2389 PSI. ATTEMPT BALL OUT.            SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL.            STAGE FR PAD. STABLE RATE OF 70.6 BPM AT 3359 PSI. ISDP 1858. FG .69.            PERFS OPEN 39/45.            CONT FR PAD. 70.4 BPM AT 3345 PSI.            STAGE TO .75 PPA 100 MESH. 70.1 BPM AT 3280 PSI. ON PERFS 70.2 AT 3330 PSI.            STAGE TO 1 PPA 20/40 WHITE. 70.1 BPM AT 3356 PSI. ON PERFS 70.0 BPM AT 3220 PSI.            STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 3149 PSI. ON PERFS 70.1 BPM AT 3005 PSI.            STAGE TO 3 PPA 20/40 WHITE. 70.2 BPM AT 2950 PSI. ON PERFS 70.3 BPM AT 2850 PSI.            STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2853 PSI. ON PERFS 70.2 BPM AT 2812 PSI.            STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2829 PSI. ON PERFS 70.2 BPM AT 2884 PSI.            FLUSH 70.3 BPM AT 3459 PSI.            WSI WITH 2250 PSI. TURN OVER TO WIRELINE.</p> <div style="display: flex; justify-content: space-between;"> <div>             ISIP 2321              MAX RATE 70.4 BPM              AVE RATE 70.1 BPM              PMP 14,600 LBS 100 MESH              TOTAL PROP 174,700 LBS              SLK WTR 67,178 GAL              CLEAN FLUID 149,410 GAL           </div> <div>             FG .75              MAX PRES 3363 PSI              AVE PRES 3046 PSI              160,100 LBS 20/40 WHITE.              250 LBS SCALE SORB 3              20# HYBOR G (16) 78,330 GAL              BWTR 3557 BBLS           </div> </div>
16:00	1.25	17:15	PFRT	Perforating	<p>PERF STG #6- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 6 INTO LUB AND EQUALIZE 2000 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'.            RUN DOWN AND SET CBP AT 7320' WITH 1800 PSI. PULL UP AND PERF CASTLE PEAK FORM 7112'-7349' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT WELL IN WITH 1350 PSI.</p>
17:15	12.75	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00		06:00	SMTG	Safety Meeting	HES AOL AT 05:30. START EQUIP. PRIME UP CHEMS AND PUMPS. RUN QC ON FLUID. HSM- PARKING, HIGH PRESSURE, REDZONE, SMOKING.

Start Time	Dur (hr)	End Time	Code	Category	Com														
06:00	1.34	07:20	FRAC	Frac. Job	<p>FRAC STG #6- CASTLE PEAK PERFS 7112'-7349' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 933 PSI AT 06:05 BREAK DOWN 2575 PSI AT 9.5 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 1880 PSI. FLUSH W/ 6944 GAL. 30.1 BPM AT 2651 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 3295 PSI. ISDP 1802. FG .69. PERFS OPEN 39/45. CONT FR PAD. 70.4 BPM AT 3173 PSI. STAGE TO .75 PPA 100 MESH. 70.3 BPM AT 3170 PSI. ON PERFS 70.2 AT 3245 PSI. STAGE TO 1 PPA 20/40 WHITE. 70.1 BPM AT 3257 PSI. ON PERFS 70.1 BPM AT 3148 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.2 BPM AT 3098 PSI. ON PERFS 70.1 BPM AT 2905 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 2884 PSI. ON PERFS 70.1 BPM AT 2759 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2824 PSI. ON PERFS 70.0 BPM AT 2822 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2846 PSI. ON PERFS 70.0 BPM AT 2881 PSI. FLUSH 70.2 BPM AT 3504 PSI. WSI WITH 1950 PSI. TURN OVER TO WIRELINE.</p> <table> <tr> <td>ISIP 1985</td><td>FG .71</td></tr> <tr> <td>MAX RATE 70.5 BPM</td><td>MAX PRES 3287 PSI</td></tr> <tr> <td>AVE RATE 70.1 BPM</td><td>AVE PRES 2974 PSI</td></tr> <tr> <td>PMP 14,600 LBS 100 MESH</td><td>160,000 LBS 20/40 WHITE.</td></tr> <tr> <td>TOTAL PROP 174,600 LBS</td><td>250 LBS SCALE SORB 3</td></tr> <tr> <td>SLK WTR 66,655 GAL</td><td>20# HYBOR G (16) 78,133 GAL</td></tr> <tr> <td>CLEAN FLUID 148,701 GAL</td><td>BWTR 3541 BBLs</td></tr> </table>	ISIP 1985	FG .71	MAX RATE 70.5 BPM	MAX PRES 3287 PSI	AVE RATE 70.1 BPM	AVE PRES 2974 PSI	PMP 14,600 LBS 100 MESH	160,000 LBS 20/40 WHITE.	TOTAL PROP 174,600 LBS	250 LBS SCALE SORB 3	SLK WTR 66,655 GAL	20# HYBOR G (16) 78,133 GAL	CLEAN FLUID 148,701 GAL	BWTR 3541 BBLs
ISIP 1985	FG .71																		
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CLEAN FLUID 148,701 GAL	BWTR 3541 BBLs																		
07:20	1.17	08:30	PFRT	Perforating	<p>PERF STG #7- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 7 INTO LUB AND EQUALIZE 1700 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. RUN DOWN AND SET CBP AT 7100' WITH 1550 PSI. PULL UP AND PERF BLACK SHALE FORM 6791'-7080' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN OVER TO HES WITH 1350 PSI.</p>														
08:30	1.25	09:45	FRAC	Frac. Job	<p>FRAC STG #7- BLACK SHALE PERFS 6791'-7080' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 1321 PSI AT 08:36 BREAK DOWN 1968 PSI AT 9.8 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.3 BPM AT 1721 PSI. FLUSH W/ 6631 GAL. 30.2 BPM AT 2125 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.6 BPM AT 3567 PSI. ISDP 1571. FG .66. PERFS OPEN 31/45. CONT FR PAD. 70.4 BPM AT 3333 PSI. (34/45 P/O) STAGE TO .75 PPA 100 MESH. 70.2 BPM AT 3174 PSI. ON PERFS 70.3 AT 3250 PSI. STAGE TO 1 PPA 20/40 WHITE. 70.2 BPM AT 3329 PSI. ON PERFS 70.1 BPM AT 3205 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 3155 PSI. ON PERFS 70.1 BPM AT 3025 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 2885 PSI. ON PERFS 70.2 BPM AT 2782 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2713 PSI. ON PERFS 70.3 BPM AT 2627 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 2620 PSI. ON PERFS 70.3 BPM AT 2807 PSI. FLUSH 70.2 BPM AT 3242 PSI. WSI WITH 1887 PSI. TURN OVER TO WIRELINE.</p> <table> <tr> <td>ISIP 1914</td><td>FG .71</td></tr> <tr> <td>MAX RATE 70.4 BPM</td><td>MAX PRES 3330 PSI</td></tr> <tr> <td>AVE RATE 69.9 BPM</td><td>AVE PRES 2954 PSI</td></tr> <tr> <td>PMP 13,460 LBS 100 MESH</td><td>140,300 LBS 20/40 WHITE.</td></tr> <tr> <td>TOTAL PROP 153,760 LBS</td><td>250 LBS SCALE SORB 3</td></tr> <tr> <td>SLK WTR 59,668 GAL</td><td>20# HYBOR G (16) 68010 GAL</td></tr> <tr> <td>CLEAN FLUID 131,570 GAL</td><td>BWTR 3133 BBLs</td></tr> </table>	ISIP 1914	FG .71	MAX RATE 70.4 BPM	MAX PRES 3330 PSI	AVE RATE 69.9 BPM	AVE PRES 2954 PSI	PMP 13,460 LBS 100 MESH	140,300 LBS 20/40 WHITE.	TOTAL PROP 153,760 LBS	250 LBS SCALE SORB 3	SLK WTR 59,668 GAL	20# HYBOR G (16) 68010 GAL	CLEAN FLUID 131,570 GAL	BWTR 3133 BBLs
ISIP 1914	FG .71																		
MAX RATE 70.4 BPM	MAX PRES 3330 PSI																		
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
09:45	1.24	11:00	WLWK	Wireline	PU 5-1/2" EXELIS PLUG AND SETTING TOOLS. EQUALIZE PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. SET KILL PLUG AT 6740' W/ PSI. BLEED OFF WELL AS POOH. SHUT IN AND SECURE WELL.
11:00	3.00	14:00	SRIG	Rig Up/Down	RDMO HES AND SLB.
14:00	16.00	06:00	GOP	General Operations	WELL SHUT IN AND SECURE. SPOT TANK FOR RIG. STACK WTR. MOVE TANKS TO 5-16D-45.

**4-5D-45 BTR 5/21/2013 06:00 - 5/22/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	1.00	08:00	SRIG	Rig Up/Down	MIRU RIG & EQUIPMENT.
08:00	3.00	11:00	BOPI	Install BOP's	SIWP- 0. N/D FRAC TREE. N/U BOP & HYDRILL. R/U FLOOR & EQUIPMENT. SPOT CATWALK & PIPE RACKS. LOAD 286 JTS ON RACKS & TALLY TBG.
11:00	3.50	14:30	RUTB	Run Tubing	P/U 4-3/4 BIT, POBS, 1 JT 2-7/8 TBG & 2.31 XN- NIPPLE. RIH P/U 2-7/8 L-80 TBG TO KILL PLUG @ 6740'
14:30	3.50	18:00	DOPG	Drill Out Plugs	R/U POWER SWIVEL. BREAK CIRC. TEST CIRC EQUIPMENT & BOPE TO 2500 PSI, HELD.  D/O KILL PLUG @ 6740'. FCP- 700 ON 32/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7081'. C/O SAND & D/O CBP @ 7100'. FCP- 750 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7290'. C/O SAND & D/O CBP @ 7369'. FCP- 600 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7593'. C/O SAND & D/O CBP @ 7620'. FCP- 600 ON 28/64 CHOKE. CIRC WELL CLEAN. R/D SWIVEL. SDFN. TURN WELL OVER TO FLOW BACK. SDFN.
18:00	12.00	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL WELL SECURE.

**4-5D-45 BTR 5/22/2013 06:00 - 5/23/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	4.00	11:00	DOPG	Drill Out Plugs	FCP- 550 ON 24/64 CHOKE. SWIVEL IN HOLE, TAG SAND @ 7723'. BREAK CIRC. C/O SAND & D/O CBP @ 7868'. FCP- 650 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 8122'. C/O SAND & D/O CBP @ 8138'. FCP- 650 ON 30/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 8381'. C/O SAND & D/O CBP @ 8394'. FCP- 800 ON 30/64 CHOKE.  SWIVEL IN HOLE, TAG SAND @ 8674'. C/O TO FLOAT COLLAR @ 8767'. D/O F/C. D/O CMT TO 8836' PBTD. JT 277 ALL THE WAY IN. CIRC WELL CLEAN. PUMPED 350 BBLs TOTAL. R/D SWIVEL
11:00	1.00	12:00	PULT	Pull Tubing	PULL ABOVE PERFS L/D 2-7/8 TBG TO 6712' & LAND TBG. 210 JTS TOTAL IN HOLE.
12:00	1.50	13:30	IWHD	Install Wellhead	R/D FLOOR. N/D BOPE. N/U WELLHEAD. DROP BALL DOWN TBG & PUMPED BIT OFF. R/U TO SALES LINE. TURN OVER TO FLOW BACK.
13:30	2.00	15:30	SRIG	Rig Up/Down	R/D RIG & EQUIPMENT. SDFN.
15:30	14.50	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL. TBG FLOWING TO SALES.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____				5. Lease Serial No. 1420H626261	
2. Name of Operator BILL BARRETT CORPORATION    Contact: CHRISTINA HIRTLE E-Mail: chirtler@billbarrettcorp.com				6. If Indian, Allottee or Tribe Name	
3. Address    1099 18TH STREET SUITE 2300 DENVER, CO 80202			3a. Phone No. (include area code) Ph: 303-312-8597		7. Unit or CA Agreement Name and No.
4. Location of Well (Report location clearly and in accordance with Federal requirements)*  At surface    NWNW 755FNL 1292FWL  At top prod interval reported below    NWNW 792FNL 829FWL  At total depth    NWNW 833FNL 809FWL				8. Lease Name and Well No. 4-5D-45 BTR	
14. Date Spudded 01/31/2013				15. Date T.D. Reached 04/13/2013	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 05/21/2013				9. API Well No. 43-013-51242	
18. Total Depth:    MD    8885 TVD    8843				19. Plug Back T.D.:    MD    8768 TVD    8726	
20. Depth Bridge Plug Set:    MD TVD				10. Field and Pool, or Exploratory ALTAMONT	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GR,CBL,MUD				11. Sec., T., R., M., or Block and Survey or Area    Sec 5 T4S R5W Mer UBM	
22. Was well cored? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)				12. County or Parish DUCHESNE	
13. State UT				17. Elevations (DF, KB, RT, GL)* 5782 GL	

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26.000	16.000 COND	65.0	0	80	80				
12.250	9.625 J-55	36.0	0	2292	2290	725	332	0	
8.750	5.500 P110	17.0	0	8885	8858	1370	459	2732	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	6713							

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) GREEN RIVER	6791	7601	6791 TO 7601	0.380	135	OPEN
B) WASATCH	7625	8668	7625 TO 8668	0.380	165	OPEN
C)						
D)						

## 26. Perforation Record

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
6791 TO 7601	GREEN RIVER SEE ATTACHED STAGES 5-7
7625 TO 8668	WASATCH SEE ATTACHED STAGES 1-4

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/21/2013	05/25/2013	24		468.0	1170.0	918.0	52.0		FLOWS FROM WELL
Choke Size 26/64	Tbg. Press. Flwg. 1950 SI	Csg. Press. 850.0	24 Hr. Rate 	Oil BBL 468	Gas MCF 1170	Water BBL 918	Gas:Oil Ratio 2500	Well Status POW	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate 	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #210485 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

RECEIVED: Jun. 13, 2013

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(*Sold, used for fuel, vented, etc.*)  
SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GREEN RIVER MAHOGANY TGR3 DOUGLAS CREEK BLACK SHALE CASTLE PEAK UTELAND BUTTE WASATCH	3027 3850 5149 6038 6804 7079 7385 7625

## 32. Additional remarks (include plugging procedure):

TOC was calculated by CBL. Conductor cemented with grout. Attached is Treatment data, Logs(CBL will be mailed due to file size) and End of Well Report. First oil sales were on 5/25/2013, first gas sales were on 5/22/2013.

## 33. Circle enclosed attachments:

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #210485 Verified by the BLM Well Information System.  
For BILL BARRETT CORPORATION, sent to the Vernal**

Name(*please print*) CHRISTINA HIRTLERTitle ADMINISTRATIVE ASSISTANT

Signature \_\_\_\_\_ (Electronic Submission)

Date 06/12/2013

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

**RECEIVED: Jun. 13, 2013**

**4-5D-45 BTR Completion Report Continued\***

<b>44. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. (cont.)</b>				
<b>AMOUNT AND TYPE OF MATERIAL</b>				
<u><i>Stage</i></u>	<u><i>BBS Slurry</i></u>	<u><i>lbs 100 Common Mesh</i></u>	<u><i>lbs 20/40 White Sand</i></u>	<u><i>gal 15% HCl Acid</i></u>
1	3145		150100	3937
2	2815		95900	3534
3	3120		149900	3912
4	3107		149900	3898
5	3557	14600	160100	3902
6	3540	14600	160000	3913
7	3133	13460	140300	3892

\*Depth intervals for frac information same as perforation record intervals.



# SPERRY-SUN DRILLING SERVICES

## CERTIFIED SURVEY WORK SHEET

OPERATOR:	Bill Barrett Corp.
WELL:	4-5D-45 BTR
FIELD:	BTR
RIG:	Nabors M22
LEGALS:	Sec. 5-T4S-R5W
COUNTY:	Duchesne
STATE:	Utah
CAL. METHOD:	Min. Curv.
MAG. DECL. APPLIED:	11.31
VERTICAL SEC. DIR. :	93.050

SSDS Job Number :	900198586
Start Date of Job :	3/10/2013
End Date of Job :	4/14/2013
Lead Directional Driller:	Paul St.Onge
	Wesley Cline
Other SSDS DD's :	
SSDS MWD Engineers :	Freddy Hale
	Adam Sampson

Geo Pilot Engineer :

	Main Hole =====>	1st Side Track =====>	2nd Side Track =====>	3rd Side Track =====>	4th Side Track =====>
Surface Casing	2290.00	Tie-on	Tie On	Tie On	Tie On
First Wireline Survey		SS	MWD		
Last Wireline Survey		SS			
KOP Depth/Sidetrack MD		KOP	KOP-ST1	KOP-ST2	KOP-ST3
MWD Tie-on					
First MWD Survey Depth	154.00	MWD	MWD	MWD	MWD
Last MWD Survey Depth	8805.00	MWD	MWD	MWD	MWD
Bit Extrapolation @ TD	8868.00	T.D.	T.D.	T.D.	T.D.

The following Sperry Drilling Services personnel, certify the above survey information to be accurate to the best of our knowledge:

Print Name : Paul St.Onge

Print Name : Wesley Cline

Print Name :

Sign Name :

Sign Name :

Sign Name :

Print Name : Freddy Hale

Print Name : Adam Sampson

Print Name :

Sign Name :

Sign Name :

Sign Name :

Examples of  
Survey Types:

TieOn  
MWD  
ESS  
Gyro  
SS

Tie On to Surface Casing (Assumed Vertical), Tie On to existing MWD Survey (prior drilled hole)  
Sperry-Sun Drilling Services (SSDS) Measurement While Drilling (MWD) Survey's  
Sperry-Sun Drilling Services (SSDS) Electronic Survey System (ESS) Survey's  
Gyro Survey's ; Provided by third party vendor, or by Sperry-Sun Drilling Services (SSDS)  
Single Shot (SS) Survey's ; Provided by Sperry-Sun Drilling Services (SSDS) or third party vendor.

RECEIVED: Jun. 13, 2013

**HALLIBURTON**

Duchesne County, UT (NAD 1927)

**Design Report for 4-5D-45 BTR - Sperry Final Surveys**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00
154.00	0.40	198.800	154.00	-0.51	-0.17	0.23	0.26
<b>First Sperry MWD Survey @ 154.00' MD</b>							
215.00	0.51	210.160	215.00	-0.95	-0.38	0.48	0.23
276.00	0.53	223.340	275.99	-1.39	-0.71	0.86	0.20
337.00	0.38	210.900	336.99	-1.76	-1.01	1.20	0.29
399.00	0.30	244.790	398.99	-2.01	-1.26	1.48	0.34
460.00	0.30	267.600	459.99	-2.08	-1.56	1.79	0.19
521.00	0.39	327.310	520.99	-1.92	-1.83	2.04	0.58
589.00	0.46	318.370	588.99	-1.52	-2.14	2.30	0.14
650.00	0.44	319.350	649.99	-1.16	-2.46	2.57	0.04
711.00	0.26	302.240	710.98	-0.91	-2.73	2.81	0.34
772.00	0.21	291.160	771.98	-0.79	-2.95	3.02	0.11
834.00	0.32	274.790	833.98	-0.74	-3.22	3.29	0.21
895.00	0.42	259.060	894.98	-0.76	-3.61	3.68	0.23
956.00	0.76	243.550	955.98	-0.99	-4.20	4.28	0.61
1,017.00	0.85	230.900	1,016.97	-1.45	-4.91	5.04	0.33
1,078.00	0.28	236.370	1,077.97	-1.82	-5.38	5.56	0.94
1,139.00	0.29	73.180	1,138.97	-1.86	-5.36	5.54	0.92
1,201.00	0.74	34.280	1,200.97	-1.48	-4.99	5.12	0.88
1,261.00	0.89	19.210	1,260.96	-0.72	-4.61	4.67	0.43
1,323.00	0.68	12.360	1,322.96	0.09	-4.38	4.34	0.37
1,384.00	0.31	357.440	1,383.95	0.61	-4.31	4.21	0.64
1,445.00	0.29	284.830	1,444.95	0.82	-4.46	4.34	0.58
1,508.00	0.60	240.480	1,507.95	0.69	-4.90	4.79	0.70
1,572.00	0.78	221.060	1,571.95	0.20	-5.48	5.42	0.46
1,635.00	0.52	238.730	1,634.94	-0.27	-6.01	6.00	0.52
1,698.00	0.52	295.550	1,697.94	-0.30	-6.51	6.50	0.79
1,762.00	0.72	312.860	1,761.94	0.10	-7.07	7.01	0.42
1,825.00	0.81	242.190	1,824.93	0.16	-7.75	7.68	1.41
1,888.00	1.31	206.950	1,887.92	-0.69	-8.47	8.49	1.27
1,951.00	0.99	193.220	1,950.91	-1.86	-8.92	9.08	0.67
2,015.00	0.77	176.380	2,014.90	-2.82	-9.02	9.29	0.53
2,326.00	3.38	183.990	2,325.67	-14.06	-9.53	11.08	0.84
2,389.00	2.75	181.490	2,388.58	-17.42	-9.70	11.64	1.02
2,452.00	1.43	163.280	2,451.54	-19.69	-9.51	11.71	2.32
2,516.00	0.82	123.850	2,515.53	-20.71	-8.90	11.22	1.49
2,579.00	0.84	78.860	2,578.52	-20.87	-8.07	10.42	1.01
2,642.00	1.03	25.920	2,641.51	-20.27	-7.37	9.66	1.35
2,706.00	1.12	348.270	2,705.50	-19.14	-7.25	9.40	1.09
2,769.00	0.93	336.970	2,768.49	-18.07	-7.57	9.60	0.44
2,832.00	0.68	326.360	2,831.49	-17.28	-7.98	9.92	0.46
2,895.00	1.28	282.520	2,894.48	-16.82	-8.87	10.75	1.46
2,959.00	2.39	297.310	2,958.44	-16.05	-10.76	12.53	1.87
3,022.00	4.36	309.210	3,021.33	-13.94	-13.78	15.29	3.30
3,085.00	5.57	305.660	3,084.09	-10.64	-18.12	19.22	1.98
3,148.00	6.37	299.040	3,146.75	-7.16	-23.66	24.33	1.67
3,211.00	7.59	292.870	3,209.29	-3.85	-30.55	30.79	2.27
3,275.00	8.31	289.320	3,272.67	-0.67	-38.81	38.63	1.36
3,338.00	9.35	282.540	3,334.92	1.94	-48.10	47.56	2.33

**HALLIBURTON**

Duchesne County, UT (NAD 1927)

**Design Report for 4-5D-45 BTR - Sperry Final Surveys**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
3,401.00	10.36	278.300	3,397.00	3.87	-58.70	57.86	1.97
3,465.00	11.13	274.870	3,459.87	5.23	-70.55	69.48	1.56
3,528.00	11.21	272.420	3,521.68	6.00	-82.73	81.49	0.76
3,591.00	10.15	267.430	3,583.59	6.01	-94.39	93.07	2.23
3,654.00	9.77	264.130	3,645.64	5.22	-105.26	103.95	1.09
3,717.00	10.62	265.390	3,707.64	4.20	-116.36	115.10	1.39
3,781.00	10.96	267.950	3,770.51	3.51	-128.32	127.06	0.92
3,844.00	10.50	267.970	3,832.41	3.09	-140.04	138.75	0.73
3,907.00	10.31	264.440	3,894.38	2.34	-151.39	150.11	1.06
3,970.00	11.02	265.680	3,956.29	1.34	-163.00	161.76	1.18
4,034.00	11.09	266.320	4,019.10	0.49	-175.25	174.02	0.22
4,097.00	11.17	263.900	4,080.92	-0.55	-187.36	186.18	0.75
4,158.00	11.81	268.870	4,140.69	-1.30	-199.48	198.30	1.93
4,222.00	11.88	274.030	4,203.33	-0.97	-212.60	211.29	1.66
4,285.00	11.34	271.990	4,265.04	-0.30	-225.25	223.79	1.08
4,348.00	10.90	269.530	4,326.86	-0.13	-237.40	235.84	1.03
4,412.00	10.39	267.920	4,389.76	-0.39	-249.22	247.61	0.92
4,475.00	10.14	265.990	4,451.75	-0.98	-260.43	258.81	0.67
4,538.00	9.83	263.760	4,513.80	-1.95	-271.31	269.73	0.79
4,601.00	9.31	260.440	4,575.92	-3.39	-281.68	280.19	1.20
4,663.00	9.19	258.490	4,637.12	-5.21	-291.48	290.14	0.54
4,726.00	9.67	270.480	4,699.27	-6.17	-301.70	300.40	3.20
4,790.00	10.37	277.440	4,762.30	-5.37	-312.78	311.32	2.18
4,853.00	10.78	277.130	4,824.23	-3.91	-324.25	322.55	0.66
4,916.00	10.09	273.090	4,886.18	-2.88	-335.61	333.71	1.60
4,979.00	9.74	272.790	4,948.24	-2.32	-346.44	344.41	0.56
5,043.00	11.08	278.040	5,011.19	-1.20	-357.94	355.70	2.56
5,106.00	11.27	278.080	5,073.00	0.51	-370.03	367.51	0.30
5,168.00	10.63	275.140	5,133.87	1.88	-381.72	378.97	1.37
5,231.00	9.93	271.990	5,195.86	2.59	-392.94	390.03	1.42
5,294.00	9.17	267.470	5,257.98	2.55	-403.38	400.41	1.69
5,358.00	8.54	264.340	5,321.22	1.86	-413.21	410.24	1.24
5,421.00	8.18	261.830	5,383.55	0.76	-422.30	419.40	0.81
5,485.00	7.84	258.600	5,446.93	-0.75	-431.09	428.30	0.88
5,548.00	7.38	254.860	5,509.37	-2.66	-439.20	436.59	1.07
5,611.00	7.20	249.020	5,571.86	-5.13	-446.80	444.41	1.21
5,674.00	6.27	240.250	5,634.43	-8.25	-453.47	451.40	2.20
5,738.00	5.61	232.290	5,698.09	-11.89	-458.98	457.29	1.65
5,801.00	5.39	228.200	5,760.80	-15.75	-463.62	462.35	0.71
5,864.00	4.14	213.850	5,823.58	-19.61	-467.09	466.24	2.73
5,927.00	2.95	193.210	5,886.46	-23.08	-468.73	468.27	2.74
5,989.00	2.14	170.680	5,948.40	-25.77	-468.91	468.75	2.05
6,052.00	1.75	120.150	6,011.37	-27.42	-467.88	467.93	2.69
6,116.00	1.66	88.580	6,075.34	-27.89	-466.11	466.22	1.46
6,179.00	1.58	84.940	6,138.32	-27.79	-464.34	464.45	0.21
6,241.00	1.66	79.010	6,200.29	-27.54	-462.60	462.70	0.30
6,304.00	1.04	111.410	6,263.28	-27.58	-461.17	461.28	1.52
6,367.00	1.15	155.950	6,326.26	-28.36	-460.38	460.59	1.33
6,431.00	1.36	169.850	6,390.25	-29.70	-459.99	460.35	0.58
6,494.00	1.85	183.190	6,453.22	-31.45	-459.91	460.47	0.97
6,557.00	1.74	181.570	6,516.19	-33.42	-460.00	460.78	0.19

**HALLIBURTON**

Duchesne County, UT (NAD 1927)

**Design Report for 4-5D-45 BTR - Sperry Final Surveys**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
6,620.00	0.91	175.490	6,579.18	-34.87	-459.98	460.94	1.33
6,684.00	0.86	223.950	6,643.17	-35.73	-460.28	461.33	1.14
6,747.00	1.10	247.230	6,706.16	-36.30	-461.16	462.27	0.73
6,810.00	1.95	270.960	6,769.14	-36.52	-462.79	463.92	1.65
6,874.00	2.97	254.590	6,833.08	-36.94	-465.48	466.64	1.92
6,937.00	4.35	259.390	6,895.95	-37.81	-469.40	470.63	2.24
7,000.00	3.77	263.280	6,958.79	-38.49	-473.81	475.09	1.02
7,064.00	1.83	232.070	7,022.71	-39.37	-476.70	478.06	3.75
7,127.00	2.99	149.840	7,085.67	-41.41	-476.67	478.27	5.22
7,190.00	3.64	150.810	7,148.57	-44.57	-474.87	476.84	1.04
7,253.00	3.25	135.500	7,211.45	-47.59	-472.64	474.98	1.58
7,317.00	2.68	111.370	7,275.37	-49.43	-469.98	472.54	2.12
7,380.00	2.32	77.010	7,338.31	-49.68	-467.36	469.98	2.41
7,443.00	1.38	35.970	7,401.28	-48.78	-465.67	468.19	2.49
7,507.00	1.43	333.680	7,465.27	-47.44	-465.58	467.94	2.27
7,570.00	0.95	283.260	7,528.26	-46.62	-466.43	468.70	1.75
7,633.00	1.06	233.280	7,591.25	-46.85	-467.41	469.69	1.36
7,697.00	1.01	208.950	7,655.24	-47.70	-468.16	470.53	0.69
7,760.00	1.11	183.130	7,718.23	-48.79	-468.46	470.96	0.77
7,823.00	1.69	186.080	7,781.21	-50.32	-468.59	471.27	0.93
7,886.00	1.88	181.720	7,844.18	-52.28	-468.72	471.62	0.37
7,950.00	2.09	179.900	7,908.14	-54.50	-468.75	471.91	0.34
8,013.00	2.48	185.740	7,971.09	-57.00	-468.88	472.33	0.72
8,076.00	2.81	190.070	8,034.02	-59.88	-469.29	473.06	0.61
8,140.00	3.01	193.920	8,097.94	-63.05	-469.97	474.10	0.44
8,203.00	2.99	197.800	8,160.85	-66.22	-470.87	475.36	0.32
8,266.00	2.53	202.970	8,223.78	-69.07	-471.91	476.73	0.83
8,330.00	2.22	222.440	8,287.73	-71.28	-473.30	478.36	1.34
8,393.00	1.81	232.770	8,350.69	-72.79	-474.92	480.14	0.87
8,456.00	1.61	244.960	8,413.66	-73.76	-476.51	481.84	0.66
8,519.00	1.12	277.870	8,476.64	-74.05	-477.92	483.27	1.44
8,583.00	0.54	298.250	8,540.63	-73.82	-478.81	484.12	1.00
8,646.00	0.81	237.800	8,603.63	-73.92	-479.45	484.77	1.14
8,709.00	1.30	220.540	8,666.62	-74.70	-480.29	485.70	0.92
8,805.00	1.68	211.960	8,762.59	-76.72	-481.74	487.37	0.46
<b>Last Sperry MWD Survey @ 8805.00' MD</b>							
8,868.00	1.68	211.960	8,825.56	-78.29	-482.72	488.52	0.00
<b>Straight Line Projection to TD @ 8868.00' MD</b>							

**Design Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
154.00	154.00	-0.51	-0.17	First Sperry MWD Survey @ 154.00' MD
8,805.00	8,762.59	-76.72	-481.74	Last Sperry MWD Survey @ 8805.00' MD
8,868.00	8,825.56	-78.29	-482.72	Straight Line Projection to TD @ 8868.00' MD

**HALLIBURTON**

Duchesne County, UT (NAD 1927)

**Design Report for 4-5D-45 BTR - Sperry Final Surveys****Vertical Section Information**

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/_S (ft)	Origin +E/-W (ft)	Start TVD (ft)
Target	4-5D-45 BTR_BHL Plat	263.386	Slot	0.00	0.00	0.00

**Survey tool program**

From (ft)	To (ft)	Survey/Plan	Survey Tool
154.00	8,868.00	Sperry MWD Surveys	MWD

**Targets**

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
4-5D-45 BTR_BHL Pla	0.00	0.00	8,795.00	-55.71	-480.44	669,554.28	2,285,056.46	40° 10' 1.729 N	110° 28' 47.860 W
- actual wellpath misses target center by 21.89ft at 8836.86ft MD (8794.43 TVD, -77.52 N, -482.23 E)									
- Point									
4-5D-45 BTR_ZONE T	0.00	0.00	6,350.00	-55.71	-480.44	669,554.28	2,285,056.46	40° 10' 1.729 N	110° 28' 47.860 W
- actual wellpath misses target center by 33.65ft at 6391.18ft MD (6350.44 TVD, -28.83 N, -460.20 E)									
- Rectangle (sides W200.00 H200.00 D2,445.00)									
4-5D-45 BTR_SHL	0.00	0.00	0.00	0.01	0.00	669,615.48	2,285,536.19	40° 10' 2.280 N	110° 28' 41.671 W
- actual wellpath hits target center									
- Point									



**North Reference Sheet for Sec. 5-T4S-R5W - 4-5D-45 BTR - Plan A**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to True North Reference.

Vertical Depths are relative to RKB 22' @ 5795.00ft (Nabors M22). Northing and Easting are relative to 4-5D-45 BTR

Coordinate System is US State Plane 1927 (Exact solution), Utah Central 4302 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Lambert Conformal Conic (2 parallel)

Central Meridian is 111° 30' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:40° 39' 0.000 N°

False Easting: 2,000,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99991560

Grid Coordinates of Well: 669,615.47 ft N, 2,285,536.19 ft E

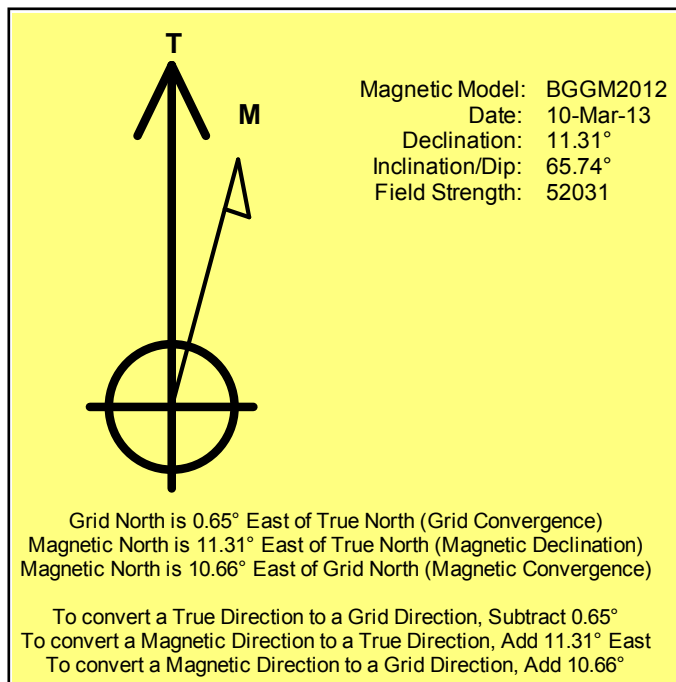
Geographical Coordinates of Well: 40° 10' 02.28" N, 110° 28' 41.67" W

Grid Convergence at Surface is: 0.65°

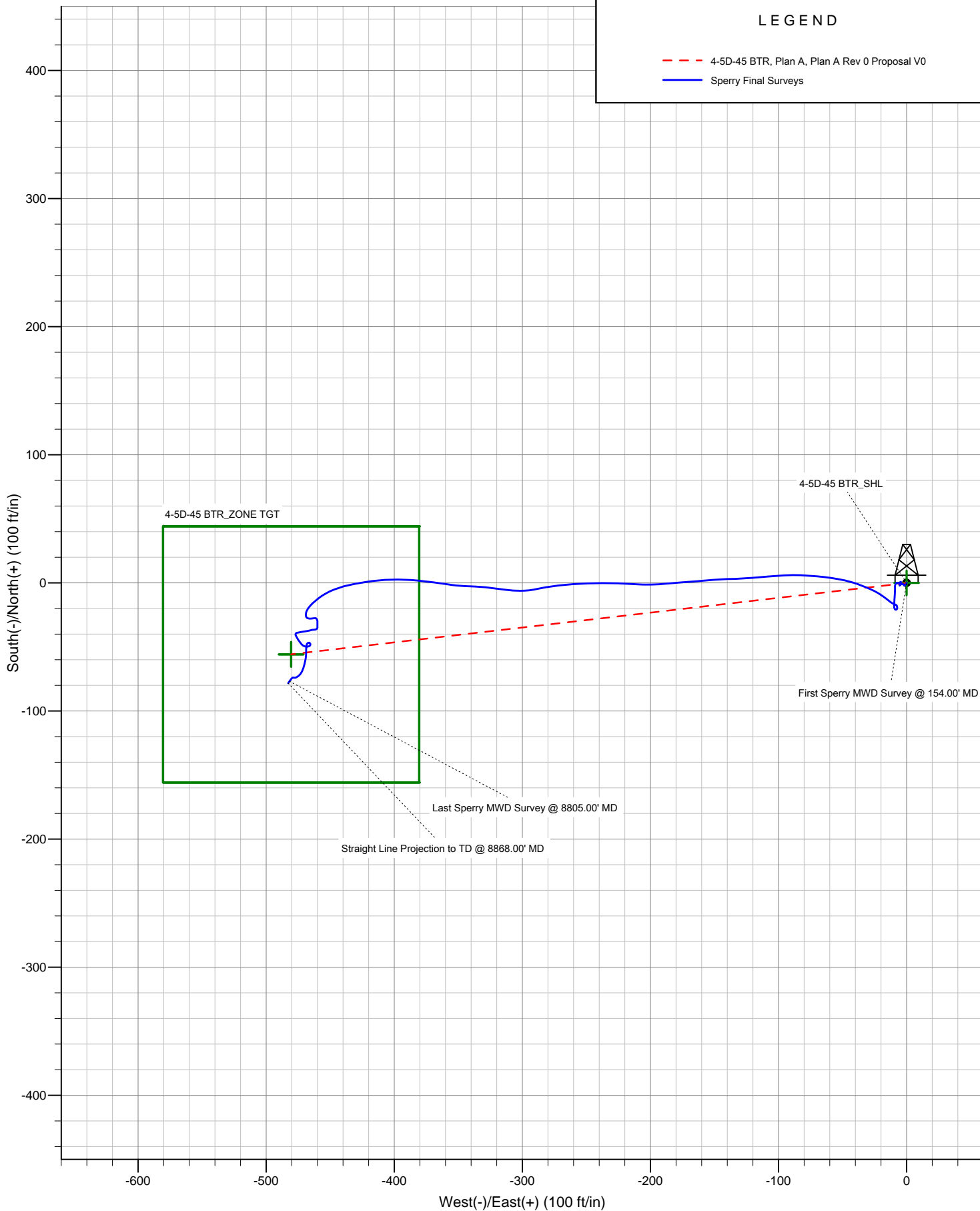
Based upon Minimum Curvature type calculations, at a Measured Depth of 8,868.00ft

the Bottom Hole Displacement is 489.03ft in the Direction of 260.79° (True).

Magnetic Convergence at surface is: -10.66° (10 March 2013, , BGGM2012)





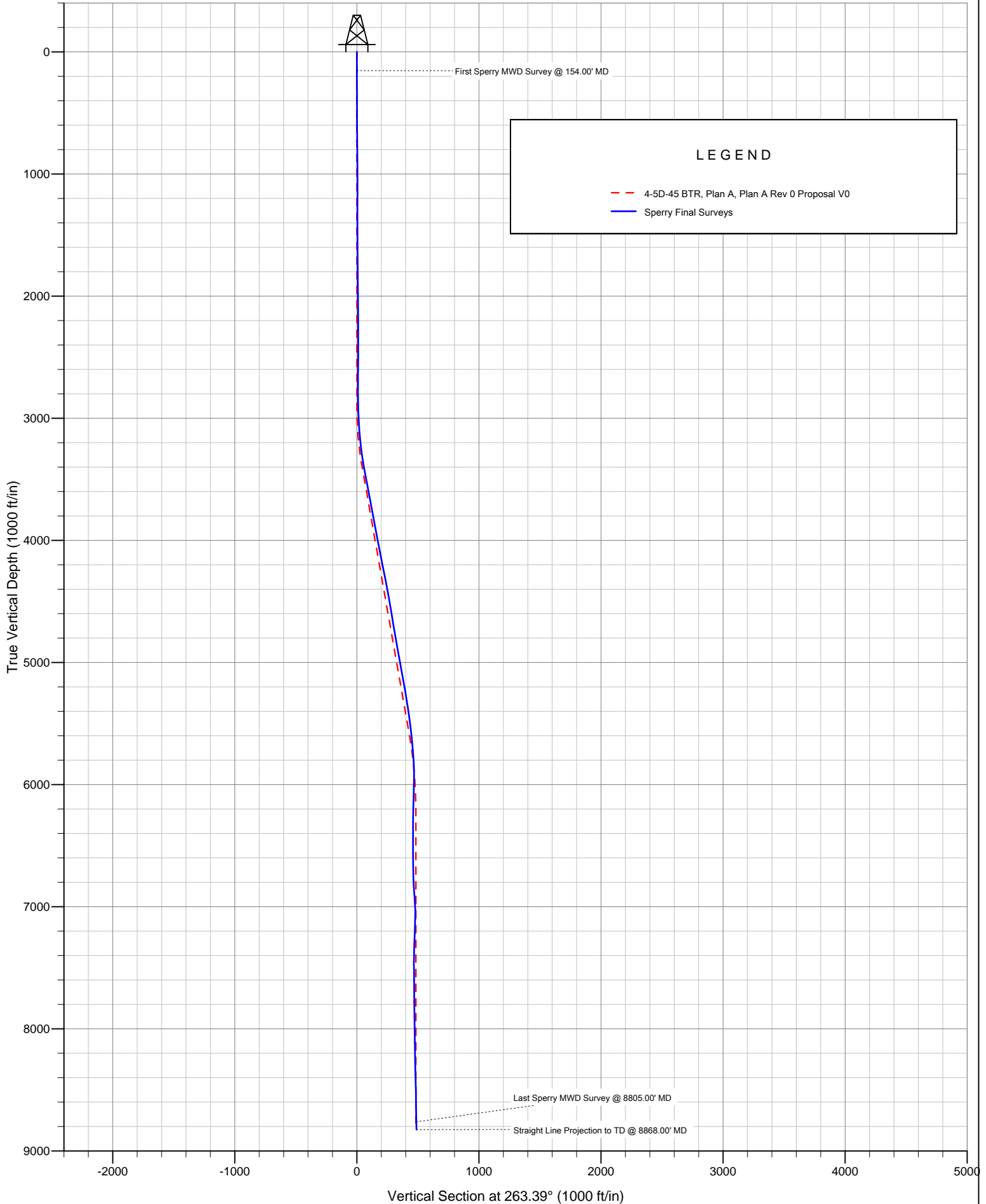


API Well Number: 43013512420000

Project: Duchesne County, UT (NAD 1927)  
Site: Sec. 5-T4S-R5W  
Well: 4-5D-45 BTR

Bill Barrett Corp

**HALLIBURTON**  
Sperry Drilling



RECEIVED: Jun. 13, 2013

**4-5D-45 BTR 3/7/2013 22:00 - 3/8/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
22:00	8.00	06:00	1	RIGUP & TEARDOWN	Rig down Prepare for trucks. Move camps.

**4-5D-45 BTR 3/8/2013 06:00 - 3/9/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	MIRU, Mud tanks and entire backyard set in.

**4-5D-45 BTR 3/9/2013 06:00 - 3/10/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	1	RIGUP & TEARDOWN	Move and assemble Substructure and derrick. Derrick ready to raise.

**4-5D-45 BTR 3/10/2013 06:00 - 3/11/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.00	02:00	1	RIGUP & TEARDOWN	Raise derrick, Continue rig up.
02:00	2.50	04:30	21	OPEN	Rig up conductor, flowline and turnbuckles.
04:30	1.50	06:00	21	OPEN	Rack & strap BHA

**4-5D-45 BTR 3/11/2013 06:00 - 3/12/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	7.00	13:00	20	DIRECTIONAL WORK	P/U dir tools & orient drill to 179'
13:00	0.50	13:30	7	LUBRICATE RIG	Rig service
13:30	5.00	18:30	2	DRILL ACTUAL	Drig 179-317'.
18:30	0.50	19:00	7	LUBRICATE RIG	Rig service
19:00	11.00	06:00	2	DRILL ACTUAL	Drig 317-997'. Survey @ 895' .42 inc 259 az. MW 8.6+#/gal 39 vis

**4-5D-45 BTR 3/12/2013 06:00 - 3/13/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	20.50	02:30	2	DRILL ACTUAL	Drill 997' - 2083'.
02:30	3.50	06:00	21	OPEN	Took gas kick, circulated pits & weight up to 9.5 ppg. Gas bubble to surface @ 05:00, flash fire on floor. Drill line parted @ 05:15, dropped top drive to floor. @ 06:00 circulating 9.5 kill mud @ 110 strokes, 1200 psi.

**4-5D-45 BTR 3/13/2013 06:00 - 3/14/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 9.5 ppg, 46 vis until 23:00, raised mw to 9.8 ppg. BBC and Nabors safety standdown, planning for remedial action.

**4-5D-45 BTR 3/14/2013 06:00 - 3/15/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Fire marshall inspected rig. Rigged up 500 ton crane, pulled catwalk out of way.

**4-5D-45 BTR 3/15/2013 06:00 - 3/16/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	13.00	19:00	5	COND MUD & CIRC	Circulate well @ 110 strokes, 1200 psi. Put counterweights on crane, tied on to top drive. Flow check, pull top drive up and set slips. Cut drilling line and tie off, remove blocks. Establish PIR (1 bpm-41 psi; 2 bpm-60 psi; 3 bpm-143 psi).
19:00	2.50	21:30	21	OPEN	R/U DCT wireline, perforate HWDP @ 1666'.
21:30	6.00	03:30	5	COND MUD & CIRC	C&C hole/wait on cement.

**4-5D-45 BTR 3/16/2013 06:00 - 3/17/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	5	COND MUD & CIRC	Circulate well @ 70 strokes, 725 psi/wait on cement.
12:00	2.00	14:00	17	PLUG BACK	HSM. R/U HES. Pressure test to 3000 psi, pump 30 bbls tuned lite spacer @ 10.5 ppg, 4.15 yld, 27.82 gps H2O. Mix and pump 610 sx(247 bbls) tuned light cement @ 11 ppg, 2.28 yld, 10.48 gps H2O @ 4 bpm. Pump 3.5 bbls to clear lines. Full returns, max pressure 400 psi. Returned 25 bbls cmt to surface. Cement fell 6" in 45 minutes. Drained and flushed conductor. Cement job witnessed and okayed by Glade Rich of Vernal BLM.
14:00	16.00	06:00	13	WAIT ON CEMENT	Wait on cement. Checked cmt @ 23:00, too soft to cut off.

**4-5D-45 BTR 3/17/2013 06:00 - 3/18/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	13	WAIT ON CEMENT	WOC. Repair rig.
10:00	6.00	16:00	21	OPEN	Used gas sniffer on DP and conductor, no indications of gas. Cut on conductor, Gas indications up through cement. Cut off conductor and DP, weld 1/2" plate w/2" 3000# ball valve on top of conductor. Well contained, BLM and State contacted.
16:00	14.00	06:00	8	REPAIR RIG	Removed and replaced top drive, blocks, ST-80 iron roughneck. Drawworks readied for removal.

**4-5D-45 BTR 3/18/2013 06:00 - 3/19/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Set rotary table on floor, move crane. Remove & replace drawworks. Set walking system with crane.

**4-5D-45 BTR 3/19/2013 06:00 - 3/20/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Had to remove DW (wrong style), wait on replacement. Install new DW. Finish setting walking system. Rearranged housing to accomodate skid. Replace and repair electric and hydraulic components.

**4-5D-45 BTR 3/20/2013 06:00 - 3/21/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Continue installation of DW, rotary table, various components. Walked rig 30' east removed matting boards, mark new hole w/Uintah Engineering.

**4-5D-45 BTR 3/21/2013 06:00 - 3/22/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	8	REPAIR RIG	Repair rig. Modify DW skid, hook up and test same. Mechanics and electricians hook up, troubleshoot, and test components. Walked rig back another 20', remove matting board so cellar ring would fit.

**4-5D-45 BTR 3/22/2013 06:00 - 3/23/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	12.00	18:00	8	REPAIR RIG	Install new chips in topdrive, test same. Walked rig back over well. Install I-BOP, saver sub. Rig 100% repaired.
18:00	12.00	06:00	14	NIPPLE UP B.O.P	Fabricated riser, weld on casing wiper bowl. HSM with all personnel, Well cap vented, cut conductor off.

**4-5D-45 BTR 3/23/2013 06:00 - 3/24/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	14	NIPPLE UP B.O.P	Did not get conductor cut off, too much gas. Cameron cut csg w/air saw. NU drilling spool, annular, riser. Welded (2)6" support I-beams to csg on cellar bottom. Hook up flow line, choke line to HCR valve, put blooie line together to flare box. Rig up floor.

**4-5D-45 BTR 3/24/2013 06:00 - 3/25/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	21.00	03:00	14	NIPPLE UP B.O.P	Clean area; remove tubulars off location to relocate flare box. Weld and fabricate blooie lines, vent line to flare box. Debug pumps, ST-80 iron roughneck, hydraulic leaks.
03:00	3.00	06:00	21	OPEN	HSM w/all personnel; operational procedure to wash over DP. Troubleshoot hydraulic leaks & electrical faults, catwalk problems.

**4-5D-45 BTR 3/25/2013 06:00 - 3/26/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	19	FISHING	PU 2 jts 8.125" WP & start washover 4 1/2" DP. Washover to 56', acted like milling on tool jt. X/O mills, won't mill off. Toh, determined to be beside DP. Drain stack, guide shoe over DP, resume washover. Wash f/25' - 340'. Cement had no integrity until 250', spotty from there to 340'. Rig Service. Safety meeting - first day back.

**4-5D-45 BTR 3/26/2013 06:00 - 3/27/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.50	10:30	19	FISHING	Wash over DP 340' - 429'. Cement spotty, short intervals(2'-15') hard, mostly soft. MW - 9.8 ppg, vis 40 spq.
10:30	0.50	11:00	7	LUBRICATE RIG	Rig service. Check COM.
11:00	6.50	17:30	19	FISHING	Wash over DP 429' - 684'. Wob 3-5k. Cmt firmer, still green. Intermittent gas, 2767 units highest. Venting through gas buster, no flare. MW - 9.8 ppg, vis 39 spq.
17:30	1.50	19:00	5	COND MUD & CIRC	C&C mud, raise mw to 10 ppg.
19:00	3.00	22:00	6	TRIPS	Toh, stand WP in derrick. No drag, hole filled properly.
22:00	8.00	06:00	6	TRIPS	PU 10" mill shoe, 12 jts 10" WP, wash in hole. Tih washing 8.125 and 7.625 WP. Safety meeting - housekeeping.

**4-5D-45 BTR 3/27/2013 06:00 - 3/28/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	6	TRIPS	Wash to bottom. Hole clean.
09:00	7.00	16:00	19	FISHING	Wash over fish 684' - 1058'. Cement firm but still green.
16:00	1.00	17:00	5	COND MUD & CIRC	C&C mud.
17:00	5.00	22:00	6	TRIPS	LD WP. Hole clean, filled properly, no drag.
22:00	1.00	23:00	19	FISHING	PU overshot, grapple, packoff, latch on to DP.
23:00	7.00	06:00	19	FISHING	Remove Pragma and clean catwalk area. RU crane, Cudd. Transfer mud from shaker pits to suction pits, clean same, fill with 9.5# brine.

**4-5D-45 BTR 3/28/2013 06:00 - 3/29/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	19	FISHING	Supersuck shaker pits, fill w/200 bbls 10# brine, cut back to 9.5#.
09:00	6.00	15:00	19	FISHING	Wait on X-overs
15:00	2.00	17:00	19	FISHING	Release overshot from fish top. Laydown 5 3/4" washpipe subs and over shot. P/U 8 1/8" overshot and 4.5" 16.6# Drill pipe subs Engage fish. Pull 5K over string. Set slips and put CTU back on well.
17:00	12.00	05:00	19	FISHING	Est pump rate of .9 bpm @ 4200#. RIH drill cmt to 739'. Well flowing over conductor. Discovered plugged flowline causing returns to back up. Cleaned out flowline and resumed drilling. Fell thru cmt @ 1675'. RIH to 1950. Clrc clean and POH.
05:00	1.00	06:00	19	FISHING	Toh w/coiled tubing.

**4-5D-45 BTR 3/29/2013 06:00 - 3/30/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	19	FISHING	Finish POH coil tbg and rig down. Set Pragma and catwalk in. Rig up wireline and RIH to freepoint. Pulled off of fish top. POH wireline. Redress overshot and get on fish again. Pickup 2 6" drill collars with bumper sub and work overshot down on fishtop. Pick up to 95000# several times.
16:00	8.00	00:00	19	FISHING	Rig up Wireline and run freepoint. Pipe free @ 1016', 1047' 50% stuck @ 1229'. Run backoff @ 1016' Backoff successful. POH wireline.
00:00	3.50	03:30	19	FISHING	Circulate brine out of hole. Circulate and condition mud.
03:30	2.50	06:00	19	FISHING	Fill trip tanks. Do flow check. HSM Pull up and L/D overshot and TOH.

**4-5D-45 BTR 3/30/2013 06:00 - 3/31/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	19	FISHING	TOH & Std Back 2 Std DP & 5 Std HWDP. Fish Recovered = 1016'.
07:00	8.00	15:00	19	FISHING	Rack - Strap & P/U 945' Of Wash Pipe.
15:00	15.00	06:00	19	FISHING	Wash Over Fish f/ 1023' To 1271' ( 248' ). SSP 450 Psi, Gpm 715, Rpm 45, Wob 3k - 5k. Reaming Every 10' Washed.

**4-5D-45 BTR 3/31/2013 06:00 - 4/1/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	19	FISHING	Wash Over Fish f/ 1271' to 1389' ( 118' ) - Began Hydraulic Lift as 8 1/8" Wash pipe Went Over Fish Top. Parameters Start To Change - Firm Cement Decision Made To TOH & Attempt To Back Off 350' Of Fish.
16:00	4.50	20:30	19	FISHING	TOH w/ 5 Stds HWDP - Rack Back 8 1/8" Wash Pipe -
20:30	1.50	22:00	19	FISHING	L/D 11 Jts 10" Wash Pipe.
22:00	0.50	22:30	7	LUBRICATE RIG	Rig Service - Change Out 2" Valve On Mud Line.
22:30	3.00	01:30	19	FISHING	M/U Screw In Sub - TIH L/D & Replace 3 HWDP - P/U 18 Jts DP.
01:30	0.50	02:00	19	FISHING	Screw Into Fish @ 1016'
02:00	4.00	06:00	19	FISHING	Rig Up "DCT" Wireline Tools & RIH w/ Core Barrel & Spang Jars Hit Obstruction @ 1531' - Make 2 Runs, Core Bbl Full Of Cement. Make 3rd Run.



**4-5D-45 BTR 4/1/2013 06:00 - 4/2/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	19	FISHING	Run Free Point ( DCT Wireline Co.) Pipe Free to 1514' - Run String Shot & Back- off @ 1356' ( Washed Over To 1389' ) POH R/D Wireline.
10:00	2.50	12:30	19	FISHING	TOH W/ Fish ( 366' ) - Pump Thru & Flush Fish - L/D Screw In Sub & Top Jt Of Fish And Joint Shot At Btm Of Fish.
12:30	3.00	15:30	19	FISHING	M/U 9.0" O.D Shoe & 8 1/8" Wash pipe - 7 5/8 " WP Assy - TIH
15:30	0.50	16:00	7	LUBRICATE RIG	Rig Service.
16:00	14.00	06:00	19	FISHING	Tag @ 1090' - Wash to Top Of Cement @ 1389' - Wash Over Fish F/ 1389' To 1492' ( 103' ). Raised Visc f/ 40 to 50 Sec/ Qt. - No Mud Lost To Date.

**4-5D-45 BTR 4/2/2013 06:00 - 4/3/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	19.00	01:00	19	FISHING	Wash Over Fish F/ 1492' to 1655' ( 163' ) Fell Thru Cement @ 1655'.
01:00	0.50	01:30	5	COND MUD & CIRC	Circ & Evaluate Wellbore Conditions - No Mud Gain Or Loss, No Increase In Gas ( 65 u ) All Things Stable As Before.
01:30	4.50	06:00	19	FISHING	Continue To Wash Over Fish f/ 1655' To 1820' ( 165' ). Taking Wt Periodically To Mill Off. Conditioning Mud & Evaluating All Parameters. NO MUD LOSS TO DATE..

**4-5D-45 BTR 4/3/2013 06:00 - 4/4/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.50	09:30	19	FISHING	Wash Over Fish in 12 1/4" Open Hole Annulus w/ 9.0" O.D. Shoe From 1820' to 1944' ( 124' ).
09:30	0.50	10:00	5	COND MUD & CIRC	C&C mud.
10:00	3.00	13:00	6	TRIPS	TOH. LDWP.
13:00	1.50	14:30	6	TRIPS	PU skirted screw-in sub, TIH to 1350'.
14:30	0.50	15:00	5	COND MUD & CIRC	Circulate BU.
15:00	6.00	21:00	19	FISHING	Screw in to fish, can't fully torque up, fish is turning. PU 110k on string, fish is free. TOH, backream f/1944' - 1674' past cmt.
21:00	6.00	03:00	19	FISHING	LD fishing tools, remainder of fish. Run pipe in derrick in hole, and lay down. Hole filled correctly, no loss, no gas.
03:00	0.50	03:30	7	LUBRICATE RIG	Rig Service.
03:30	2.50	06:00	6	TRIPS	PU 8" MM, dialed to straight. Racked & strapped 9 6.5" DCs, 27 4.5" HWDP.

**4-5D-45 BTR 4/4/2013 06:00 - 4/5/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	6.00	12:00	3	REAMING	PU BHA, DP, clean hole out f/1200' - 2083'. Easy washing, some formation and cement. 1150-1200 psi @ 594 gpm.
12:00	1.00	13:00	5	COND MUD & CIRC	C&C, pump 2 25 bbl sweeps 20 minutes apart. Sent recovered fish to CSI for cleaning and inspection.
13:00	4.50	17:30	2	DRILL ACTUAL	Drill 2083' - 2170'. 594 gpm, spp 1450 psi, dp 200 psi, rop 20 fph. Hole torque in spots, no losses, no gas.
17:30	0.50	18:00	7	LUBRICATE RIG	Rig service. Check COM.
18:00	3.00	21:00	2	DRILL ACTUAL	Drill 2170' - 2292'. 594 gpm, spp 1450 psi, dp 175 psi, rop 41 fph.
21:00	1.00	22:00	5	COND MUD & CIRC	C&C mud, run 2 sweeps. Pump pill.
22:00	2.50	00:30	6	TRIPS	Toh. Hole in good shape, took correct amount of fill, no losses, no gas.
00:30	5.50	06:00	12	RUN CASING & CEMENT	RU casers, run 9 5/8", 36#, J-55, LT&C csg as follows: GS, 1 jt csg, FC, 51 jts csg. Bow spring centralizers - 1 - 10' from shoe, top of jts 2 and 4, every other jt to 2072'.

**4-5D-45 BTR 4/5/2013 06:00 - 4/6/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.00	09:00	5	COND MUD & CIRC	Install rot rubber, C&C mud f/cmt.
09:00	2.50	11:30	12	RUN CASING & CEMENT	HSM. Cement surface csg as follows: Pump 20 bbls H2O, 40 bbls superflush, 20 bbls H2O. Mix and pump 340 sx(167.7 bbls) Halcem lead cmt @ 11.8 ppg, 2.77 yld, 16.67 gps H2O. Mix and pump 385 sx(165.5 bbls) Halcem tail cmt @ 14.8 ppg, 1.37 yld, 6.62 gps H2O. Wash lines, drop top plug, displace w/173.5 bbls mud(last 20 bbls H2O to clean lines. Max pressure 950 psi, bump plug to 1506 psi, floats held. Full returns, 97 bbls cmt to surf, no gas. Job witnessed by Ray Arnold of Vernal BLM.
11:30	6.50	18:00	13	WAIT ON CEMENT	Cement set too quickly to 1", wait 6.5 hrs to relax pipe and cut off. Cement very hard. Agreed upon by Ray Arnold.
18:00	12.00	06:00	21	OPEN	ND riser, annular, cut csg off, clean pits. Riser full of hard cement.

**4-5D-45 BTR 4/6/2013 06:00 - 4/7/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	21	OPEN	Weld on csg head. 3" double male cam-lock w/3" steel nipple dropped in hole while sucking out casing
10:00	2.00	12:00	21	OPEN	Install new Pason depth tracker box and cord on crown.
12:00	5.00	17:00	15	TEST B.O.P	HSM. Test lower kelly, safety, dart valves, pipe & blind rams, choke line, manifold valves, kill line valve, check valve, hcr to 5000 psi high, 250 psi low f/10 min. Test Hydrill to 2500 psi high, 250 psi low f/10 min. Test surface csg to 1500 psi f/30 min. Perform koomey function test. Test witnessed by Randy Bywater of Vernal NLM.
17:00	5.00	22:00	21	OPEN	Install wear bushing, rot head and flowline.
22:00	2.50	00:30	6	TRIPS	Tih w/mill tooth bit, junk sub.
00:30	5.50	06:00	21	OPEN	Tag junk @ 2239', rot @ 60 - 75 rpm, 15k - 30 wob. Stroke junk sub, run high-vis sweeps. Drill to 2241', drilled junk, wiper plug, part of float collar.

**4-5D-45 BTR 4/7/2013 06:00 - 4/8/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	6	TRIPS	Toh.
08:30	2.00	10:30	20	DIRECTIONAL WORK	PU dir BHA.
10:30	2.00	12:30	6	TRIPS	Tih.
12:30	3.50	16:00	21	OPEN	Drill flt equip, cmt, 18' new hole to 2310'. FC @ 2245', FS @ 2290'.
16:00	0.50	16:30	21	OPEN	Spot high-vis LCM pill @ shoe. FIT to 255 psi for a 10.5 ppg EMW.
16:30	2.00	18:30	2	DRILL ACTUAL	Steerable drlg 2310' - 2327'. Torquie, low differential pressure, won't drill.
18:30	2.50	21:00	6	TRIPS	Pump pill. Toh. BOP drill - 50 sec.
21:00	2.50	23:30	6	TRIPS	X/O Bit, MM. Tih.
23:30	0.50	00:00	7	LUBRICATE RIG	Rig Service.
00:00	1.00	01:00	2	DRILL ACTUAL	Drill 2327' - 2389'.
01:00	5.00	06:00	8	REPAIR RIG	Repair top drive brakes.

**4-5D-45 BTR 4/8/2013 06:00 - 4/9/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	3.50	09:30	2	DRILL ACTUAL	Steerable drlg 2389' - 2642'. wob 15k, spp 1650 psi, dp 200 psi, rpm 51/83, rop 72 fph.
09:30	0.50	10:00	7	LUBRICATE RIG	Rig Service.
10:00	5.00	15:00	2	DRILL ACTUAL	Steerable drlg 2642' - 3116'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 95 fph. BOP Drill - 45 seconds.
15:00	0.50	15:30	8	REPAIR RIG	Repair SCR house.
15:30	9.50	01:00	2	DRILL ACTUAL	Steerable drlg 3116' - 3780'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 70 fph.
01:00	0.50	01:30	7	LUBRICATE RIG	Rig Service.

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
01:30	4.50	06:00	2	DRILL ACTUAL	Steerable drlg 3780' - 4096'. wob 15-20k, spp 2150 psi, dp 200 psi, rpm 45 - 55/83, rop 70 fph.

**4-5D-45 BTR 4/9/2013 06:00 - 4/10/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	5.00	11:00	2	DRILL ACTUAL	Steerable drlg 4096' - 4441'. wob 15 - 20k, rpm 58/83, spp 2250 psi, dp 250 psi, rop 69 fph.
11:00	0.50	11:30	7	LUBRICATE RIG	Rig Service. Check COM.
11:30	13.00	00:30	2	DRILL ACTUAL	Steerable drlg 4441' - 5294'. wob 15k, rpm 58/83, spp 2450 psi, dp 250 psi, rop 66 fph.
00:30	1.00	01:30	7	LUBRICATE RIG	Rig service. Replace gripper dies.
01:30	4.50	06:00	2	DRILL ACTUAL	Steerable drlg 5294' - 5548'. wob 15k, rpm 51/65, spp 1850 psi, dp 200 psi, rop 56 fph.

**4-5D-45 BTR 4/10/2013 06:00 - 4/11/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	10.00	16:00	2	DRILL ACTUAL	Steerable drlg 5548' - 6146'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 60 fph. Lost 30 bbls mud. Start adding DAP to mud.
16:00	0.50	16:30	7	LUBRICATE RIG	Rig Service.
16:30	9.50	02:00	2	DRILL ACTUAL	Steerable drlg 6146' - 6715'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 60 fph. Lost 60 bbls mud.
02:00	0.50	02:30	7	LUBRICATE RIG	Rig Service.
02:30	3.50	06:00	2	DRILL ACTUAL	Steerable drlg 6715' - 6937'. Wob 15-20k, rpm 40-55/81, spp 2500 psi, dp 250 psi, rop 63 fph. Lost 30 bbls mud. DAP @ 1.9 ppb.

**4-5D-45 BTR 4/11/2013 06:00 - 4/12/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	0.50	06:30	2	DRILL ACTUAL	Steerable drlg 6937' - 6949'. Lost returns.
06:30	2.50	09:00	5	COND MUD & CIRC	C&C mud, pump lcm sweeps, bypass shakers, raise lcm content to 10%. Build volume, Lost 300 bbls.
09:00	5.00	14:00	2	DRILL ACTUAL	Steerable drlg 6949' - 7189'. wob 18k, rpm 55/68, spp 2250 psi, dp 250 psi, rop 48 fph. Put mud back over shakers once reamers past loss zone.
14:00	0.50	14:30	7	LUBRICATE RIG	Rig Service. BOP Drill - 55 seconds.
14:30	15.00	05:30	2	DRILL ACTUAL	Steerable drlg 7189' - 7760'. wob 20k, rpm 55/68, spp 2250 psi, dp 250 psi, rop 38 fph.
05:30	0.50	06:00	7	LUBRICATE RIG	Rig Service.

**4-5D-45 BTR 4/12/2013 06:00 - 4/13/2013 06:00**

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	8.00	14:00	2	DRILL ACTUAL	Steerable drlg 7760' - 8233'. Wob 22k, rpm 55/68, spp 2500 psi, dp 250 psi, rop 59 fph.
14:00	0.50	14:30	7	LUBRICATE RIG	Rig Service.
14:30	12.50	03:00	2	DRILL ACTUAL	Steerable drlg 8233' - 8709'. Wob 22k, rpm 45-55/68, spp 2350 psi, dp 250 psi, rop 38 fph.
03:00	0.50	03:30	7	LUBRICATE RIG	Rig Service.
03:30	2.50	06:00	2	DRILL ACTUAL	Steerable drlg 8709' - 8868'. Wob 22k, rpm 55/68, spp 2200 psi, dp 200 psi, rop 64 fph. TD Well @ 8868'.



# Bill Barrett Corporation

## 4-5D-45 BTR 4/13/2013 06:00 - 4/14/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.50	07:30	5	COND MUD & CIRC	C&C mud f/wiper trip. Pump 2 high-vis lcm sweeps, circ BU.
07:30	9.00	16:30	6	TRIPS	HSM, check flow. Wiper trip to shoe. Trip went smooth, hole in good shape, took correct amount of fluid. Had to wash past 8050' and 8450', easy washing.
16:30	2.00	18:30	5	COND MUD & CIRC	C&C hole f/logs. Circulate out gas, had 25' flare on bottoms up. Pump pill.
18:30	7.50	02:00	6	TRIPS	Toh. LD dir tools.
02:00	0.50	02:30	11	WIRELINE LOGS	HSM. RU loggers.
02:30	2.50	05:00	8	REPAIR RIG	Halliburton cmt bulk truck hit fuel rail, caused rig to run out of fuel and black out. Got rig running, fixed faults in drawworks, top drive.
05:00	1.00	06:00	11	WIRELINE LOGS	Tih w/logs.

## 4-5D-45 BTR 4/14/2013 06:00 - 4/15/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	11	WIRELINE LOGS	Log well - ran Dual Lateralog, Spectral Density, Dual Spaced Neutron, Gamma, Sonic Array, Micro Spherically Focused log. Logger's TD - 8857'. RD loggers.
10:00	2.00	12:00	6	TRIPS	PU bit, bit sub, T.I.H. F/0' T/1106'
12:00	0.50	12:30	9	CUT OFF DRILL LINE	CUT & SLIP 75' (11 WRAPS) DRILL LINE
12:30	4.50	17:00	6	TRIPS	T.I.H. F/1106' T/8868'
17:00	3.00	20:00	5	COND MUD & CIRC	CIRC- LOST RETURNS - PUMP 25% LCM SWEEP BUILD VOLUME BYPASS SHAKERS & BRING LCM CONTENT TO 15%
20:00	0.50	20:30	6	TRIPS	PULL 10 STANDS
20:30	2.50	23:00	5	COND MUD & CIRC	BUILD VOLUME & BRING LCM CONTENT TO 25%
23:00	1.00	00:00	6	TRIPS	STAGE IN THE HOLE REAM BRIDGES @ 8018' & 8500'
00:00	4.00	04:00	5	COND MUD & CIRC	PUMP HIGH VIS/LCM SWEEP - CIRC B/U - 2500-4000 UNITS BACKGROUND GAS WHILE ON GAS BUSTER - RAISE MUD WT FROM 9.8 PPG TO 10.1 PPG
04:00	0.50	04:30	6	TRIPS	FLOW CHECK - L/D DRILL PIPE FROM 8868' T/8868'
04:30	1.50	06:00	8	REPAIR RIG	DOWNTIME DUE TO STARTER MOTOR ON PRAGMA - WAITING ON LAYDOWN TRUCK & CREW

## 4-5D-45 BTR 4/15/2013 06:00 - 4/16/2013 06:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	8	REPAIR RIG	WAITING ON LAY DOWN TRUCK (PRAGMA BROKE DOWN)
08:30	0.50	09:00	7	LUBRICATE RIG	RIG SERVICE
09:00	8.50	17:30	6	TRIPS	L/D DRILL PIPE, HWDP, & 6" DCs
17:30	0.50	18:00	21	OPEN	PULL WEAR BUSHING
18:00	1.00	19:00	8	REPAIR RIG	R/D LAY DOWN TRUCK - REPLACE STARTER MOTOR ON PRAGMA
19:00	10.50	05:30	12	RUN CASING & CEMENT	S/M - R/U CSG CREW & RUN 200 JOINTS 5.5" 17# P-110 CSG W/60 CENTRALIZERS & 3 MARKER JOINTS - CSG SET @ 8858'
05:30	0.50	06:00	5	COND MUD & CIRC	CIRC - R/D CSG CREW

## 4-5D-45 BTR 4/16/2013 06:00 - 4/16/2013 22:00

API/UWI 43013512420000	State/Province UT	County Duchesne	Field Name Black Tail Ridge	Well Status PRODUCING	Total Depth (ftKB) 8,868.0	Primary Job Type Drilling & Completion
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### Time Log

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.50	08:30	5	COND MUD & CIRC	CIRC B/U WHILE RIGGING UP CEMENTERS
08:30	4.00	12:30	12	RUN CASING & CEMENT	TEST LINES @ 5000 PSI, PUMP 10 BBLS WATER, 40 BBLS SUPER FLUSH, 10 BBLS WATER, 297 BBLS 720 SKS 11 PPG 2.32 YIELD LEAD CEMENT MIXED @ 10.61, 162 BBLS 635 SKS 13.5 PPG 1.43 YIELD TAIL CEMENT MIXED @ 6.65 GAL/SK, SHUT DOWN WASH LINES & DROP PLUG, DISPLACE WITH 204 BBLS CLAYWEB WATER LAND PLUG @ 1666 PSI TAKE PRESSURE 500 PSI OVER FCP & HOLD FOR 2 MIN - RELEASE PRESSURE FLOATS HELD - FULL RETURNS DURING JOB - 73 BBLS CEMENT TO SURFACE - R/D CEMENTERS
12:30	1.50	14:00	14	NIPPLE DOWN B.O.P	NIPPLE DOWN BOP
14:00	1.00	15:00	21	OPEN	SET CSG SLIPS @ 180K - CUT OFF CSG

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
15:00	7.00	22:00	21	OPEN	CLEAN MUD TANKS - RIGGING WITH CREWS - RIG RELEASED @ 2200 HRS

**4-5D-45 BTR 4/22/2013 06:00 - 4/23/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	4.00	10:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.
10:00	2.00	12:00	IWHD	Install Wellhead	Safety Meeting With Cameron, Check Surface Casing & 5.5" For Pressure, 0 Psi On Both Sides. N/D 11" Night Cap, Cleaned And Dressed Up 5.5" Csg Top, Set And N/U 11" x 7 1/16" 5k Tbg. Head With 2 1/16" x 5k Gate Valves. Tested Hanger Seals To 7100 Psi, Good Test. Secured Well Head With 7" 5K Night Cap.
12:00	18.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured. Construction Crew Working On Facilities.

**4-5D-45 BTR 4/23/2013 06:00 - 4/24/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	2.00	08:00	LOCL	Lock Wellhead & Secure	WSI Shut In And Secured.
08:00	1.50	09:30	SRIG	Rig Up/Down	MIRU SLB W/L Crew And Equipment. Hold Safety Meeting. Rig Up Gauge Ring And Logging Tool.
09:30	5.50	15:00	LOGG	Logging	P/U Junk Basket/Gauge Ring. RIH, Tagged Up At 8,737', Drilling Report Shows FC At 8,767', 30' Of Fill. POOH, P/U CBL Tool, Rih To PBTD, 8,737', Correlating To HES Spectral Density/ Dual Spaced Neutron Dated 04-14-2013. Run Repeat Section From 8,737' - 8,500', Log Up Hole. Showed Good Bond From TD To 5,400, 5,400 - 4,800' Fair, 4,800 - 2,720 Ratty. TOC 2,720'. Found Short Joints At 8,280 - 8,302, 7,688 - 7,710', And 6,314 - 6,336'. Ran With Pressure. Pooh, RD Equipment, MOL.
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	WSI And Secured

**4-5D-45 BTR 5/15/2013 06:00 - 5/16/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FRAC LINE SET. FILLING FRAC LINE. FB TANKS SET. FB EQUIP PLUMBED IN.

**4-5D-45 BTR 5/16/2013 06:00 - 5/17/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	JSA. CHECK PRESSURE. ND 7" NIGHT CAP. NU FRAC MANDREL, 5" 10K FRAC VALVES, AND FRAC HEAD. PRES TEST CSG, VALVES, AND FB EQUIP. CONT FILLING FRAC LINE.

**4-5D-45 BTR 5/17/2013 06:00 - 5/18/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	24.00	06:00	GOP	General Operations	FINISH FILLING FRAC LINE. HEAT FRAC LINE.

**4-5D-45 BTR 5/18/2013 06:00 - 5/19/2013 06:00**

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL
07:00	1.00	08:00	SRIG	Rig Up/Down	HSM. MIRU SLB WITH 5K LUBE.

Start Time	Dur (hr)	End Time	Code	Category	Com
08:00	1.00	09:00	PFRT	Perforating	PU GUNS FOR STG 1. RIH AND CORRELATE TO SJ AT 8280'-8302'. RUN DOWN AND PERF CR-4, CR-4A, AND CR-5 FORM 8405'-8668' WITH 39 HOLES IN 13' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT WELL IN.
09:00	6.00	15:00	SRIG	Rig Up/Down	MIRU HES FRAC FLEET.
15:00	15.00	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00		06:00	SMTG	Safety Meeting	HES AOL 03:45. STRAP TANKS, PRIME UP CHEMS AND PUMPS, HSM- RED ZONE, PPE, EMERGENCY PLAN, PARKING.
06:00		06:00	FRAC	Frac. Job	<p>FRAC STG #1- CR-4, CR-4A, AND CR-5 PERFS 8405'-8668' 39 HOLES IN 13' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 570 PSI AT 04:41 BREAK DOWN 3961 PSI AT 9.5 BPM. PMP 3900 GAL 15% HCL ACID W/ 78 BIO BALLS FOR DIVERSION. 10.4 BPM AT 2703 PSI. FLUSH W/ 8206 GAL. 30.5 BPM AT 3422 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4800 PSI. ISDP 2553. FG .74. PERFS OPEN 30/39. CONT FR PAD. 70.1 BPM AT 4400 PSI. (34/39 P/O) STAGE HYBOR PAD 70.5 BPM AT 4545 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.0 BPM AT 4778 PSI. ON PERFS 70.2 BPM AT 4457 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.0 BPM AT 4096 PSI. ON PERFS 70.2 BPM AT 3869 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.3 BPM AT 3735 PSI. ON PERFS 70.3 BPM AT 3650 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 3670 PSI. ON PERFS 70.2 BPM AT 3662 PSI. FLUSH 70.8 BPM AT 4045 PSI. WSI WITH 2651 PSI. TURN OVER TO WIRELINE.</p> <div style="display: flex; justify-content: space-between;"> <span>ISIP 2697</span> <span>FG .75</span> </div> <div style="display: flex; justify-content: space-between;"> <span>MAX RATE 70.5 BPM</span> <span>MAX PRES 4788 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>AVE RATE 70.2 BPM</span> <span>AVE PRES 3953 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>PMP 150,000 LBS 20/40 WHITE.</span> <span>250 LBS SCALE SORB 3</span> </div> <div style="display: flex; justify-content: space-between;"> <span>SLK WTR 66,077 GAL</span> <span>20# HYBOR G (16) 62,095 GAL</span> </div> <div style="display: flex; justify-content: space-between;"> <span>CLEAN FLUID 132,109 GAL</span> <span>BWTR 3145 BBLS</span> </div>
06:00	1.09	07:05	PFRT	Perforating	<p>PERF STG #2- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 2 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 8280'-8302'. RUN DOWN AND SET CBP AT 8394' WITH 2450 PSI. PULL UP AND PERF CR-3 AND CR-4 FORM 8147'-8374' WITH 36 HOLES IN 12' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 2400 PSI.</p>



Start Time	Dur (hr)	End Time	Code	Category	Com
07:05	1.25	08:20	FRAC	Frac. Job	<p>FRAC STG #2- CR-3, AND CR-4 PERFS 8147'-8374' 36 HOLES IN 12' NET.            PRESSURE TEST LINES TO 9200 PSI.            OPEN WELL W/ 2378 PSI AT 07:15            BREAK DOWN 2980 PSI AT 9.8 BPM.            PMP 3600 GAL 15% HCL ACID W/ 72 BIO BALLS FOR DIVERSION. 10.1 BPM AT 2810 PSI.            FLUSH W/ 7955 GAL. 30.0 BPM AT 3525 PSI. ATTEMPT BALL OUT.            SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL.            STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4818 PSI. ISDP 2516. FG .74.            PERFS OPEN 29/36.            CONT FR PAD. 70.4 BPM AT 4710 PSI.            STAGE HYBOR PAD 70.0 BPM AT 4818 PSI.            STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 4778 PSI. ON PERFS 70.2 BPM AT 4052 PSI.            STAGE TO 3 PPA 20/40 WHITE. 70.3 BPM AT 3908 PSI. ON PERFS 70.3 BPM AT 3814 PSI.            ON 3# HAD A PUMP DOWN SHIFT (NOT SURE WHY) BRING RATE BACK UP THEN NET PRESSURES STARTED CLIMBING FAST. EXTENDED 3# THEN WENT TO FLUSH.            FLUSH 70.9 BPM AT 4346 PSI.            WSI WITH 2655 PSI. TURN OVER TO WIRELINE.</p> <p style="text-align: right;">FG .76</p> <div style="display: flex; justify-content: space-between;"> <span>ISIP 2663</span> <span>MAX PRES 4823 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>AVE RATE 70.5 BPM</span> <span>AVE PRES 4068 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>PMP 95,900 LBS 20/40 WHITE.</span> <span>250 LBS SCALE SORB 3</span> </div> <div style="display: flex; justify-content: space-between;"> <span>SLK WTR 65,449 GAL</span> <span>20# HYBOR G (16) 49,163 GAL</span> </div> <div style="display: flex; justify-content: space-between;"> <span>CLEAN FLUID 118,146 GAL</span> <span>BWTR 2813 BBLS</span> </div>
08:20	1.25	09:35	PFRT	Perforating	<p>PERF STG #3- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 3 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7687'-7710'.            RUN DOWN AND SET CBP AT 8138' WITH 2400 PSI. PULL UP AND PERF CR-2 AND CR-3 FORM 7887'-8118' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 2400 PSI.</p>
09:35	1.25	10:50	FRAC	Frac. Job	<p>FRAC STG #3- CR-2 AND CR-3 PERFS 7887'-8118' 45 HOLES IN 15' NET.            PRESSURE TEST LINES TO 9200 PSI.            OPEN WELL W/ 2332 PSI AT 09:40            BREAK DOWN 2960 PSI AT 9.9 BPM.            PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 2553 PSI.            FLUSH W/ 7724 GAL. 30.1 BPM AT 3311 PSI. ATTEMPT BALL OUT.            SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL.            STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 4524 PSI. ISDP 2449. FG .74.            PERFS OPEN 31/45.            CONT FR PAD. 70.3 BPM AT 4305 PSI.            STAGE HYBOR PAD 70.0 BPM AT 4416 PSI.            STAGE TO 2 PPA 20/40 WHITE. 70.0 BPM AT 4437 PSI. ON PERFS 70.1 BPM AT 4060 PSI.            STAGE TO 3 PPA 20/40 WHITE. 70.2 BPM AT 3946 PSI. ON PERFS 70.2 BPM AT 3791 PSI.            STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 3725 PSI. ON PERFS 70.2 BPM AT 3645 PSI.            STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 3639 PSI. ON PERFS 70.2 BPM AT 3583 PSI.            FLUSH 70.6 BPM AT 4075 PSI.            WSI WITH 2750 PSI. TURN OVER TO WIRELINE.</p> <p style="text-align: right;">FG .78</p> <div style="display: flex; justify-content: space-between;"> <span>ISIP 2753</span> <span>MAX PRES 4444 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>AVE RATE 70.4 BPM</span> <span>AVE PRES 3840 PSI</span> </div> <div style="display: flex; justify-content: space-between;"> <span>PMP 149,900 LBS 20/40 WHITE.</span> <span>250 LBS SCALE SORB 3</span> </div> <div style="display: flex; justify-content: space-between;"> <span>SLK WTR 65,045 GAL</span> <span>20# HYBOR G (16) 62,115 GAL</span> </div> <div style="display: flex; justify-content: space-between;"> <span>CLEAN FLUID 131,072 GAL</span> <span>BWTR 3121 BBLS</span> </div>
10:50	1.16	12:00	PFRT	Perforating	<p>PERF STG #4- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 4 INTO LUB AND EQUALIZE 2550 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 7687'-7710'.            RUN DOWN AND SET CBP AT 7868' WITH 2400 PSI. PULL UP AND PERF WASATCH AND CR-2 FORM 7625'-7848' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 1150 PSI.</p>

Start Time	Dur (hr)	End Time	Code	Category	Com
12:00	1.34	13:20	FRAC	Frac. Job	<p>FRAC STG #4- WASATCH AND CR-2 PERFS 7625'-7848' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 893 PSI AT 12:10 BREAK DOWN 2264 PSI AT 9.7 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.3 BPM AT 2182 PSI. FLUSH W/ 7445 GAL. 30.2 BPM AT 2981 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 3910 PSI. ISDP 1891. FG .68. PERFS OPEN 31/45. CONT FR PAD. 70.4 BPM AT 3613 PSI. (35/45 P/O) STAGE HYBOR PAD 70.0 BPM AT 3630 PSI. STAGE TO 2 PPA 20/40 WHITE. 69.8 BPM AT 3652 PSI. ON PERFS 70.1 BPM AT 3331 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 3237 PSI. ON PERFS 70.2 BPM AT 3054 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.0 BPM AT 3004 PSI. ON PERFS 70.1 BPM AT 2956 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2951 PSI. ON PERFS 70.1 BPM AT 2905 PSI. FLUSH 70.1 BPM AT 3501 PSI. WSI WITH 2250 PSI. TURN OVER TO WIRELINE.</p> <p>ISIP 2244                      FG .73 MAX RATE 70.5 BPM          MAX PRES 3680 PSI AVE RATE 70.1 BPM          AVE PRES 3108 PSI PMP 149,900 LBS 20/40 WHITE.      250 LBS SCALE SORB 3 SLK WTR 60,830 GAL          20# HYBOR G (16) 62,111 GAL CLEAN FLUID 126,879 GAL          BWTR 3021 BBLS</p>
13:20	1.25	14:35	PFRT	Perforating	<p>PERF STG #5- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 5 INTO LUB AND EQUALIZE 2000 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. RUN DOWN AND SET CBP AT 7620' WITH 1700 PSI. PULL UP AND PERF CR-1 FORM 7377'-7601' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN WELL OVER TO HES WITH 1600 PSI.</p>
14:35	1.41	16:00	FRAC	Frac. Job	<p>FRAC STG #5- CR-1 PERFS 7377'-7601' 45 HOLES IN 15' NET. PRESSURE TEST LINES TO 9200 PSI. OPEN WELL W/ 1360 PSI AT 14:40 BREAK DOWN 1825 PSI AT 9.8 BPM. PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 1739 PSI. FLUSH W/ 7202 GAL. 30.4 BPM AT 2389 PSI. ATTEMPT BALL OUT. SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL. STAGE FR PAD. STABLE RATE OF 70.6 BPM AT 3359 PSI. ISDP 1858. FG .69. PERFS OPEN 39/45. CONT FR PAD. 70.4 BPM AT 3345 PSI. STAGE TO .75 PPA 100 MESH. 70.1 BPM AT 3280 PSI. ON PERFS 70.2 AT 3330 PSI. STAGE TO 1 PPA 20/40 WHITE. 70.1 BPM AT 3356 PSI. ON PERFS 70.0 BPM AT 3220 PSI. STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 3149 PSI. ON PERFS 70.1 BPM AT 3005 PSI. STAGE TO 3 PPA 20/40 WHITE. 70.2 BPM AT 2950 PSI. ON PERFS 70.3 BPM AT 2850 PSI. STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2853 PSI. ON PERFS 70.2 BPM AT 2812 PSI. STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2829 PSI. ON PERFS 70.2 BPM AT 2884 PSI. FLUSH 70.3 BPM AT 3459 PSI. WSI WITH 2250 PSI. TURN OVER TO WIRELINE.</p> <p>ISIP 2321                      FG .75 MAX RATE 70.4 BPM          MAX PRES 3363 PSI AVE RATE 70.1 BPM          AVE PRES 3046 PSI PMP 14,600 LBS 100 MESH          160,100 LBS 20/40 WHITE. TOTAL PROP 174,700 LBS          250 LBS SCALE SORB 3 SLK WTR 67,178 GAL          20# HYBOR G (16) 78,330 GAL CLEAN FLUID 149,410 GAL          BWTR 3557 BBLS</p>

Start Time	Dur (hr)	End Time	Code	Category	Com
16:00	1.25	17:15	PFRT	Perforating	PERF STG #6- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 6 INTO LUB AND EQUALIZE 2000 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. RUN DOWN AND SET CBP AT 7320' WITH 1800 PSI. PULL UP AND PERF CASTLE PEAK FORM 7112'-7349' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. SHUT WELL IN WITH 1350 PSI.
17:15	12.75	06:00	LOCL	Lock Wellhead & Secure	WELL SHUT IN AND SECURE.

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00		06:00	SMTG	Safety Meeting	HES AOL AT 05:30. START EQUIP. PRIME UP CHEMS AND PUMPS. RUN QC ON FLUID. HSM- PARKING, HIGH PRESSURE, REDZONE, SMOKING.
06:00	1.34	07:20	FRAC	Frac. Job	<p>FRAC STG #6- CASTLE PEAK PERFS 7112'-7349' 45 HOLES IN 15' NET.  PRESSURE TEST LINES TO 9200 PSI.  OPEN WELL W/ 933 PSI AT 06:05  BREAK DOWN 2575 PSI AT 9.5 BPM.  PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.4 BPM AT 1880 PSI.  FLUSH W/ 6944 GAL. 30.1 BPM AT 2651 PSI. ATTEMPT BALL OUT.  SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL.  STAGE FR PAD. STABLE RATE OF 70.4 BPM AT 3295 PSI. ISDP 1802. FG .69.  PERFS OPEN 39/45.  CONT FR PAD. 70.4 BPM AT 3173 PSI.  STAGE TO .75 PPA 100 MESH. 70.3 BPM AT 3170 PSI. ON PERFS 70.2 AT 3245 PSI.  STAGE TO 1 PPA 20/40 WHITE. 70.1 BPM AT 3257 PSI. ON PERFS 70.1 BPM AT 3148 PSI.  STAGE TO 2 PPA 20/40 WHITE. 70.2 BPM AT 3098 PSI. ON PERFS 70.1 BPM AT 2905 PSI.  STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 2884 PSI. ON PERFS 70.1 BPM AT 2759 PSI.  STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2824 PSI. ON PERFS 70.0 BPM AT 2822 PSI.  STAGE TO 4 PPA 20/40 WHITE. 70.1 BPM AT 2846 PSI. ON PERFS 70.0 BPM AT 2881 PSI.  FLUSH 70.2 BPM AT 3504 PSI.  WSI WITH 1950 PSI. TURN OVER TO WIRELINE.</p> <div style="display: flex; justify-content: space-between;"> <div> ISIP 1985  MAX RATE 70.5 BPM  AVE RATE 70.1 BPM  PMP 14,600 LBS 100 MESH  TOTAL PROP 174,600 LBS  SLK WTR 66,655 GAL  CLEAN FLUID 148,701 GAL </div> <div> FG .71  MAX PRES 3287 PSI  AVE PRES 2974 PSI  160,000 LBS 20/40 WHITE.  250 LBS SCALE SORB 3  20# HYBOR G (16) 78,133 GAL  BWTR 3541 BBLs </div> </div>
07:20	1.17	08:30	PFRT	Perforating	<p>PERF STG #7- PU EXELIS 5-1/2" CBP AND GUNS FOR STAGE 7 INTO LUB AND EQUALIZE 1700 PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'.  RUN DOWN AND SET CBP AT 7100' WITH 1550 PSI. PULL UP AND PERF BLACK SHALE FORM 6791'-7080' WITH 45 HOLES IN 15' NET. POOH AND VERIFY ALL GUNS SHOT. TURN OVER TO HES WITH 1350 PSI.</p>

Start Time	Dur (hr)	End Time	Code	Category	Com
08:30	1.25	09:45	FRAC	Frac. Job	<p>FRAC STG #7- BLACK SHALE PERFS 6791'-7080' 45 HOLES IN 15' NET.            PRESSURE TEST LINES TO 9200 PSI.            OPEN WELL W/ 1321 PSI AT 08:36            BREAK DOWN 1968 PSI AT 9.8 BPM.            PMP 3900 GAL 15% HCL ACID W/ 90 BIO BALLS FOR DIVERSION. 10.3 BPM AT 1721 PSI.            FLUSH W/ 6631 GAL. 30.2 BPM AT 2125 PSI. ATTEMPT BALL OUT.            SHUT DOWN PMP. SURGE 3X. WAIT 5 MIN FOR BALLS TO FALL.            STAGE FR PAD. STABLE RATE OF 70.6 BPM AT 3567 PSI. ISDP 1571. FG .66.            PERFS OPEN 31/45.            CONT FR PAD. 70.4 BPM AT 3333 PSI. (34/45 P/O)            STAGE TO .75 PPA 100 MESH. 70.2 BPM AT 3174 PSI. ON PERFS 70.3 AT 3250 PSI.            STAGE TO 1 PPA 20/40 WHITE. 70.2 BPM AT 3329 PSI. ON PERFS 70.1 BPM AT 3205 PSI.            STAGE TO 2 PPA 20/40 WHITE. 70.1 BPM AT 3155 PSI. ON PERFS 70.1 BPM AT 3025 PSI.            STAGE TO 3 PPA 20/40 WHITE. 70.1 BPM AT 2885 PSI. ON PERFS 70.2 BPM AT 2782 PSI.            STAGE TO 3.5 PPA 20/40 WHITE. 70.1 BPM AT 2713 PSI. ON PERFS 70.3 BPM AT 2627 PSI.            STAGE TO 4 PPA 20/40 WHITE. 70.2 BPM AT 2620 PSI. ON PERFS 70.3 BPM AT 2807 PSI.            FLUSH 70.2 BPM AT 3242 PSI.            WSI WITH 1887 PSI. TURN OVER TO WIRELINE.</p> <div style="display: flex; justify-content: space-between;"> <div>             ISIP 1914              MAX RATE 70.4 BPM              AVE RATE 69.9 BPM              PMP 13,460 LBS 100 MESH              TOTAL PROP 153,760 LBS              SLK WTR 59,668 GAL              CLEAN FLUID 131,570 GAL           </div> <div>             FG .71              MAX PRES 3330 PSI              AVE PRES 2954 PSI              140,300 LBS 20/40 WHITE.              250 LBS SCALE SORB 3              20# HYBOR G (16) 68010 GAL              BWTR 3133 BBLS           </div> </div>
09:45	1.24	11:00	WLWK	Wireline	PU 5-1/2" EXELIS PLUG AND SETTING TOOLS. EQUALIZE PSI. OPEN WELL AND RIH. CORRELATE TO SJ AT 6314'-6335'. SET KILL PLUG AT 6740' W/ PSI. BLEED OFF WELL AS POOH. SHUT IN AND SECURE WELL.
11:00	3.00	14:00	SRIG	Rig Up/Down	RDMO HES AND SLB.
14:00	16.00	06:00	GOP	General Operations	WELL SHUT IN AND SECURE. SPOT TANK FOR RIG. STACK WTR. MOVE TANKS TO 5-16D-45.

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	1.00	08:00	SRIG	Rig Up/Down	MIRU RIG & EQUIPMENT.
08:00	3.00	11:00	BOPI	Install BOP's	SIWP- 0. N/D FRAC TREE. N/U BOP & HYDRILL. R/U FLOOR & EQUIPMENT. SPOT CATWALK & PIPE RACKS. LOAD 286 JTS ON RACKS & TALLY TBG.
11:00	3.50	14:30	RUTB	Run Tubing	P/U 4-3/4 BIT, POBS, 1 JT 2-7/8 TBG & 2.31 XN- NIPPLE. RIH P/U 2-7/8 L-80 TBG TO KILL PLUG @ 6740'
14:30	3.50	18:00	DOPG	Drill Out Plugs	R/U POWER SWIVEL. BREAK CIRC. TEST CIRC EQUIPMENT & BOPE TO 2500 PSI, HELD.  D/O KILL PLUG @ 6740'. FCP- 700 ON 32/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7081'. C/O SAND & D/O CBP @ 7100'. FCP- 750 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7290'. C/O SAND & D/O CBP @ 7369'. FCP- 600 ON 28/64 CHOKE.  SWIVEL IN HOLE. TAG SAND @ 7593'. C/O SAND & D/O CBP @ 7620'. FCP- 600 ON 28/64 CHOKE. CIRC WELL CLEAN. R/D SWIVEL. SDFN. TURN WELL OVER TO FLOW BACK. SDFN.
18:00	12.00	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL WELL SECURE.

API/UWI	State/Province	County	Field Name	Well Status	Total Depth (ftKB)	Primary Job Type
43013512420000	UT	Duchesne	Black Tail Ridge	PRODUCING	8,868.0	Drilling & Completion

**Time Log**

Start Time	Dur (hr)	End Time	Code	Category	Com
06:00	1.00	07:00	CTRL	Crew Travel	CREW TRAVEL. HOLD SAFETY MEETING.
07:00	4.00	11:00	DOPG	Drill Out Plugs	<p>FCP- 550 ON 24/64 CHOKE. SWIVEL IN HOLE, TAG SAND @ 7723'. BREAK CIRC. C/O SAND &amp; D/O CBP @ 7868'. FCP- 650 ON 28/64 CHOKE.</p> <p>SWIVEL IN HOLE. TAG SAND @ 8122'. C/O SAND &amp; D/O CBP @ 8138'. FCP- 650 ON 30/64 CHOKE.</p> <p>SWIVEL IN HOLE. TAG SAND @ 8381'. C/O SAND &amp; D/O CBP @ 8394'. FCP- 800 ON 30/64 CHOKE.</p> <p>SWIVEL IN HOLE, TAG SAND @ 8674'. C/O TO FLOAT COLLAR @ 8767'. D/O F/C. D/O CMT TO 8836' PBTD. JT 277 ALL THE WAY IN. CIRC WELL CLEAN. PUMPED 350 BBLS TOTAL. R/D SWIVEL</p>
11:00	1.00	12:00	PULT	Pull Tubing	PULL ABOVE PERFS L/D 2-7/8 TBG TO 6712' & LAND TBG. 210 JTS TOTAL IN HOLE.
12:00	1.50	13:30	IWHD	Install Wellhead	R/D FLOOR. N/D BOPE, N/U WELLHEAD. DROP BALL DOWN TBG & PUMPED BIT OFF. R/U TO SALES LINE. TURN OVER TO FLOW BACK.
13:30	2.00	15:30	SRIG	Rig Up/Down	R/D RIG & EQUIPMENT. SDFN.
15:30	14.50	06:00	LOCL	Lock Wellhead & Secure	CREW TRAVEL. TBG FLOWING TO SALES.

Effective Date: 11/1/2016

<b>FORMER OPERATOR:</b>	<b>NEW OPERATOR:</b>
Bill Barrett Corporation 1099 18th Street, Suite 2300 Denver, CO 80202	Rig II, LLC 1582 West 2600 South Woods Cross, UT 84087
CA Number(s):	Unit(s):

**WELL INFORMATION:**

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
See Attached List									

**OPERATOR CHANGES DOCUMENTATION:**

1. Sundry or legal documentation was received from the **FORMER** operator on: 10/21/2016
2. Sundry or legal documentation was received from the **NEW** operator on: 10/21/2016
3. New operator Division of Corporations Business Number: 8256968-0160

**REVIEW:**

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
2. Receipt of Acceptance of Drilling Procedures for APD on: 10/21/2016
3. Reports current for Production/Disposition & Sundries: 11/2/2016
4. OPS/SI/TA well(s) reviewed for full cost bonding: 11/3/2016
5. UIC5 on all disposal/injection/storage well(s) approved on: 11/3/2016
6. Surface Facility(s) included in operator change: None
7. Inspections of PA state/fee well sites complete on (only upon operators request): 11/3/2016

**NEW OPERATOR BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: UTB000712
2. Indian well(s) covered by Bond Number: LPM 922467
3. State/fee well(s) covered by Bond Number(s): 9219529

**DATA ENTRY:**

1. Well(s) update in the **OGIS** on: 11/7/2016
2. Entity Number(s) updated in **OGIS** on: 11/7/2016
3. Unit(s) operator number update in **OGIS** on: N/A
4. Surface Facilities update in **OGIS** on: N/A
5. State/Fee well(s) attached to bond(s) in **RBDMS** on: 11/7/2016
6. Surface Facilities update in **RBDMS** on: N/A

**COMMENTS:**



From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

Well Name	Sec	TWN	RNG	API Number	Entity	Mineral	Surface	Type	Status
SWD 9-36 BTR	9	030S	060W	4301350646	18077	Indian	Fee	WD	A
16-6D-46 BTR SWD	6	040S	060W	4301350781	18327	Indian	Fee	WD	A
6-32-36 BTR SWD	32	030S	060W	4301350921	18329	Indian	Fee	WD	A
LC TRIBAL 8-26D-47	26	040S	070W	4301334024		Indian	Indian	OW	APD
16-21D-37 BTR	21	030S	070W	4301350758		Indian	Fee	OW	APD
14-11D-37 BTR	11	030S	070W	4301350862		Indian	Fee	OW	APD
7-17D-46 BTR	17	040S	060W	4301350883		Indian	Indian	OW	APD
14-12D-37 BTR	12	030S	070W	4301350894		Indian	Fee	OW	APD
1-18D-36 BTR	18	030S	060W	4301350922		Indian	Fee	OW	APD
13-2D-45 BTR	2	040S	050W	4301350931		Indian	Indian	OW	APD
5H-16-46 BTR	16	040S	060W	4301350992		Indian	Indian	OW	APD
9H-17-45 BTR	17	040S	050W	4301351098		Indian	Indian	OW	APD
13H-8-46 BTR UB	8	040S	060W	4301351124		Indian	Indian	OW	APD
8H-9-46 BTR	9	040S	060W	4301351140		Indian	Indian	OW	APD
LC TRIBAL 7-31D-37	31	030S	070W	4301351147		Indian	Fee	OW	APD
14-16D-45 BTR	16	040S	050W	4301351178		Indian	Indian	OW	APD
16-19D-37 BTR	19	030S	070W	4301351179		Indian	Fee	OW	APD
6-2D-45 BTR	2	040S	050W	4301351234		Indian	Indian	OW	APD
2-2D-45 BTR	2	040S	050W	4301351235		Indian	Indian	OW	APD
10-26-35 BTR	26	030S	050W	4301351248		Indian	Fee	OW	APD
LC TRIBAL 1H-33-46	33	040S	060W	4301351257		Indian	Fee	OW	APD
LC TRIBAL 9-25D-46	25	040S	060W	4301351276		Indian	Indian	OW	APD
LC TRIBAL 8H-30-45	30	040S	050W	4301351277		Indian	Indian	OW	APD
LC TRIBAL 16H-30-45	30	040S	050W	4301351279		Indian	Indian	OW	APD
LC TRIBAL 13-30D-45	30	040S	050W	4301351282		Indian	Indian	OW	APD
LC TRIBAL 16H-36-46	36	040S	060W	4301351291		Indian	Indian	OW	APD
LC TRIBAL 13H-30-46	30	040S	060W	4301351321		Indian	Indian	OW	APD
LC TRIBAL 13H-31-46	31	040S	060W	4301351326		Indian	Indian	OW	APD
LC TRIBAL 16-31D-46	31	040S	060W	4301351328		Indian	Indian	OW	APD
LC TRIBAL 5H-26-47	26	040S	070W	4301351337		Indian	Indian	OW	APD
LC TRIBAL 5H-19-45	20	040S	050W	4301351349		Indian	Indian	OW	APD
LC TRIBAL 16-36D-47	36	040S	070W	4301351363		Indian	Indian	OW	APD
15-4D-47 BTR	4	040S	070W	4301351377		Indian	Fee	OW	APD
16-23D-46 LC TRIBAL	23	040S	060W	4301351396		Indian	Fee	OW	APD
15-2D-36 BTR	2	030S	060W	4301351419		Indian	Fee	OW	APD
16-23D-37 BTR	23	030S	070W	4301351420		Indian	Fee	OW	APD
11-9D-47 BTR	9	040S	070W	4301351422		Indian	Fee	OW	APD
15-13D-47 BTR	13	040S	070W	4301351424		Indian	Indian	OW	APD
LC TRIBAL 15-19D-46	19	040S	060W	4301351426		Indian	Indian	OW	APD
16-13D-45 BTR	13	040S	050W	4301351428		Indian	Indian	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

14-12D-45 BTR	12	040S	050W	4301351444		Indian	Indian	OW	APD
16-14D-45 BTR	14	040S	050W	4301351445		Indian	Indian	OW	APD
5-13D-45 BTR	13	040S	050W	4301351446		Indian	Indian	OW	APD
LC TRIBAL 16-26D-46	26	040S	060W	4301351450		Indian	State	OW	APD
LC TRIBAL 16-34D-46	34	040S	060W	4301351451		Indian	State	OW	APD
16-12D-45 BTR	12	040S	050W	4301351452		Indian	Indian	OW	APD
8-12D-45 BTR	12	040S	050W	4301351453		Indian	Indian	OW	APD
LC TRIBAL 1-35D-46	35	040S	060W	4301351454		Indian	Fee	OW	APD
16-25D-37 BTR	25	030S	070W	4301351455		Indian	Fee	OW	APD
LC TRIBAL 13H-29-46	28	040S	060W	4301351462		Indian	Fee	OW	APD
LC TRIBAL 14-30D-37	30	030S	070W	4301351494		Indian	Fee	OW	APD
7-13D-45 BTR	13	040S	050W	4301351497		Indian	Indian	OW	APD
LC TRIBAL 4H-35-46	35	040S	060W	4301351515		Indian	Fee	OW	APD
LC TRIBAL 13H-19-46	19	040S	060W	4301351543		Indian	Indian	OW	APD
16-26D-37 BTR	26	030S	070W	4301351598		Indian	Fee	OW	APD
LC TRIBAL 16-31D-37	31	030S	070W	4301351610		Indian	Fee	OW	APD
5-4-35 BTR	4	030S	050W	4301351613		Indian	Fee	OW	APD
LC TRIBAL 16-31D-47	31	040S	070W	4301351616		Indian	Indian	OW	APD
LC TRIBAL 13H-31-47	31	040S	070W	4301351617		Indian	Indian	OW	APD
LC TRIBAL 13-32D-47	32	040S	070W	4301351619		Indian	Indian	OW	APD
LC TRIBAL 16H-32-47	32	040S	070W	4301351620		Indian	Indian	OW	APD
LC TRIBAL 1-32D-47	32	040S	070W	4301351624		Indian	Indian	OW	APD
LC TRIBAL 4H-32-47	32	040S	070W	4301351625		Indian	Indian	OW	APD
LC TRIBAL 13-28D-47	28	040S	070W	4301351627		Indian	Indian	OW	APD
LC TRIBAL 13H-29-47	28	040S	070W	4301351628		Indian	Indian	OW	APD
LC TRIBAL 16H-28-47	28	040S	070W	4301351629		Indian	Indian	OW	APD
LC TRIBAL 1-28D-47	28	040S	070W	4301351639		Indian	Indian	OW	APD
LC TRIBAL 1H-27-47	28	040S	070W	4301351640		Indian	Indian	OW	APD
LC TRIBAL 4H-28-47	28	040S	070W	4301351641		Indian	Indian	OW	APD
LC TRIBAL 7-25D-58	25	050S	080W	4301351643		Indian	Indian	OW	APD
LC TRIBAL 6-25D-58	25	050S	080W	4301351644		Indian	Indian	OW	APD
LC TRIBAL 13H-24-58	24	050S	080W	4301351645		Indian	Indian	OW	APD
LC TRIBAL 16-24D-58	24	050S	080W	4301351646		Indian	Indian	OW	APD
LC Tribal 8-23D-46	23	040S	060W	4301351654		Indian	Fee	OW	APD
LC Tribal 16-35D-45	35	040S	050W	4301351656		Indian	Fee	OW	APD
LC Tribal 13H-35-45	35	040S	050W	4301351657		Indian	Fee	OW	APD
LC Tribal 16-36D-45	36	040S	050W	4301351658		Indian	Fee	OW	APD
LC Tribal 13H-36-45	36	040S	050W	4301351659		Indian	Fee	OW	APD
LC Tribal 5-36D-45	36	040S	050W	4301351661		Indian	Fee	OW	APD
LC Tribal 8-26D-46	26	040S	060W	4301351663		Indian	Fee	OW	APD
3-29D-36 BTR	29	030S	060W	4301351665		Indian	Fee	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 5-35D-45	35	040S	050W	4301351666	Indian	Fee	OW	APD
LC Tribal 5-24D-46	24	040S	060W	4301351668	Indian	Indian	OW	APD
LC TRIBAL 6-12D-58	12	050S	080W	4301351696	Indian	Indian	OW	APD
LC TRIBAL 8-12D-58	12	050S	080W	4301351697	Indian	Indian	OW	APD
LC TRIBAL 16H-22-47	21	040S	070W	4301351700	Indian	Indian	OW	APD
5-25D-37 BTR	25	030S	070W	4301351803	Indian	Fee	OW	APD
8-3D-36 BTR	3	030S	060W	4301351804	Indian	Fee	OW	APD
14-26D-37 BTR	26	030S	070W	4301351805	Indian	Fee	OW	APD
9-4-35 BTR	4	030S	050W	4301351806	Indian	Fee	OW	APD
11-4D-35 BTR	4	030S	050W	4301351807	Indian	Fee	OW	APD
16-27D-37 BTR	27	030S	070W	4301351808	Indian	Fee	OW	APD
14-27D-37 BTR	27	030S	070W	4301351809	Indian	Fee	OW	APD
14-16D-46 BTR	16	040S	060W	4301351812	Indian	Indian	OW	APD
LC Tribal 16-35D-48	35	040S	080W	4301351847	Indian	Indian	OW	APD
LC Tribal 13H-35-48	35	040S	080W	4301351848	Indian	Indian	OW	APD
LC Tribal 13-2D-58	11	050S	080W	4301351850	Indian	Indian	OW	APD
5-13D-36 BTR	13	030S	060W	4301351862	Indian	Fee	OW	APD
5-8D-36 BTR	8	030S	060W	4301351871	Indian	Fee	OW	APD
16-1D-36 BTR	1	030S	060W	4301351872	Indian	Fee	OW	APD
8-18D-46 BTR	18	040S	060W	4301351897	Indian	Fee	OW	APD
LC Tribal 5-36D-46	36	040S	060W	4301351905	Indian	Indian	OW	APD
LC Tribal 5-26D-45	26	040S	050W	4301351907	Indian	Indian	OW	APD
14-13D-45 BTR	13	040S	050W	4301351974	Indian	Indian	OW	APD
14-34D-46 DLB	34	040S	060W	4301351975	Indian	Fee	OW	APD
LC Tribal 5-21D-45	21	040S	050W	4301352001	Indian	Indian	OW	APD
LC Tribal 8-22D-45	22	040S	050W	4301352002	Indian	Indian	OW	APD
LC Tribal 8-25D-45	25	040S	050W	4301352007	Indian	Indian	OW	APD
LC Tribal 16-25D-45	25	040S	050W	4301352008	Indian	Indian	OW	APD
LC Tribal 16-22D-45	22	040S	050W	4301352009	Indian	Indian	OW	APD
LC Tribal 16-26D-45	26	040S	050W	4301352010	Indian	Indian	OW	APD
LC Tribal 14-31D-37	31	030S	070W	4301352016	Indian	Fee	OW	APD
5-12D-45 BTR	12	040S	050W	4301352030	Indian	Indian	OW	APD
LC Tribal 9-20D-45	20	040S	050W	4301352031	Indian	Indian	OW	APD
LC Tribal 13-35D-47	35	040S	070W	4301352055	Indian	Indian	OW	APD
LC Tribal 1-23D-47	23	040S	070W	4301352057	Indian	Indian	OW	APD
9-17D-46 BTR	17	040S	060W	4301352059	Indian	Indian	OW	APD
11-18D-46 BTR	18	040S	060W	4301352060	Indian	Indian	OW	APD
9-10D-47 BTR	10	040S	070W	4301352092	Indian	Fee	OW	APD
LC Tribal 1-17D-47	17	040S	070W	4301352096	Indian	Fee	OW	APD
7-35D-37 BTR	35	030S	070W	4301352115	Indian	Fee	OW	APD
14-25D-37 BTR	25	030S	070W	4301352116	Indian	Fee	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 5-25-46	25	040S	060W	4301352126	Indian	Indian	OW	APD
8-33D-35 BTR	33	030S	050W	4301352161	Indian	Fee	OW	APD
5-4D-36 BTR	4	030S	060W	4301352175	Indian	Fee	OW	APD
7-4D-36 BTR	4	030S	060W	4301352176	Indian	Fee	OW	APD
LC Tribal 4-36D-47	36	040S	070W	4301352186	Indian	Indian	OW	APD
LC Tribal 4-22D-46	22	040S	060W	4301352944	Indian	Indian	OW	APD
LC Tribal 16-22D-46	22	040S	060W	4301352945	Indian	Indian	OW	APD
LC Tribal 11-19D-46	19	040S	060W	4301352946	Indian	Indian	OW	APD
LC Tribal 7-20D-45	20	040S	050W	4301352947	Indian	Indian	OW	APD
15-11D-35 BTR	11	030S	050W	4301353056	Indian	Fee	OW	APD
13-11D-35 BTR	11	030S	050W	4301353057	Indian	Fee	OW	APD
BTR 16-36D-37	36	030S	070W	4301353059	Indian	Fee	OW	APD
4-29D-35 BTR	30	030S	050W	4301353060	Indian	Fee	OW	APD
1-30D-35 BTR	30	030S	050W	4301353061	Fee	Fee	OW	APD
LC TRIBAL 3-23D-46	23	040S	060W	4301353066	Indian	State	OW	APD
LC Tribal 14-23D-46	23	040S	060W	4301353067	Indian	State	OW	APD
LC Tribal 13-25D-46	25	040S	060W	4301353068	Indian	Indian	OW	APD
LC Tribal 14-26D-46	26	040S	060W	4301353069	Indian	State	OW	APD
LC Tribal 5-26D-46	26	040S	060W	4301353070	Indian	State	OW	APD
LC Tribal 11-35D-45	35	040S	050W	4301353071	Indian	State	OW	APD
LC Tribal 7-35D-45	35	040S	050W	4301353072	Indian	State	OW	APD
LC Tribal 3-35D-45	35	040S	050W	4301353075	Indian	State	OW	APD
LC Tribal 14-36D-45	36	040S	050W	4301353076	Indian	State	OW	APD
LC Tribal 13-36D-45	36	040S	050W	4301353077	Indian	State	OW	APD
LC Tribal 10-36D-45	36	040S	050W	4301353078	Indian	State	OW	APD
LC Tribal 8-36D-45	36	040S	050W	4301353079	Indian	State	OW	APD
LC Tribal 6-36D-45	36	040S	050W	4301353080	Indian	State	OW	APD
LC Tribal 1-34D-46	34	040S	060W	4301353081	Indian	State	OW	APD
LC Tribal 9-27D-46	27	040S	060W	4301353082	Indian	State	OW	APD
LC Tribal 13-35D-45	35	040S	050W	4301353083	Indian	State	OW	APD
LC Tribal 8-35D-45	35	040S	050W	4301353084	Indian	State	OW	APD
LC Tribal 15-35D-45	35	040S	050W	4301353085	Indian	State	OW	APD
LC Tribal 12-25D-45	25	040S	050W	4301353122	Indian	Indian	OW	APD
LC Tribal 14-25D-45	25	040S	050W	4301353123	Indian	Indian	OW	APD
LC Tribal 10-25D-45	25	040S	050W	4301353124	Indian	Indian	OW	APD
LC Tribal 11-26-45	26	040S	050W	4301353125	Indian	Indian	OW	APD
LC Tribal 13-26D-45	26	040S	050W	4301353126	Indian	Indian	OW	APD
LC Tribal 7-31D-46	31	040S	060W	4301353127	Indian	Indian	OW	APD
LC Tribal 7-19D-45	19	040S	050W	4301353128	Indian	Indian	OW	APD
LC Tribal 5-19D-45	19	040S	050W	4301353130	Indian	Indian	OW	APD
LC Tribal 7-25D-46	25	040S	060W	4301353132	Indian	Indian	OW	APD

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC Tribal 7-24D-46	24	040S	060W	4301353134		Indian	Indian	OW	APD
LC Tribal 14-31D-46	31	040S	060W	4301353135		Indian	Indian	OW	APD
LC Tribal 14-30D-46	30	040S	060W	4301353136		Indian	Indian	OW	APD
13-4-35 BTR SWD	4	030S	050W	4301353293		Fee	Fee	OW	APD
LC FEE 14-26D-47	26	040S	070W	4301353294		Fee	Indian	OW	APD
LC Fee 5-25D-47	25	040S	070W	4301353295		Fee	Indian	OW	APD
7-35-46 LC SWD	35	040S	060W	4301353296		Fee	Fee	OW	APD
LC Fee 1H-33-47	32	040S	070W	4301353309		Fee	Indian	OW	APD
LC FEE 14-2D-58	2	050S	080W	4301353312		Fee	Indian	OW	APD
LC FEE 13H-21-47	21	040S	070W	4301353313		Fee	Indian	OW	APD
LC Fee 16-21D-47	21	040S	070W	4301353326		Fee	Indian	OW	APD
16-7D-46 BTR	7	040S	060W	4301353328		Fee	Indian	OW	APD
LC Fee 15-26D-47	26	040S	070W	4301353331		Fee	Indian	OW	APD
LC Fee 4-24D-47	23	040S	070W	4301353332		Fee	Indian	OW	APD
LC Fee 5-34D-47	34	040S	070W	4301353333		Fee	Indian	OW	APD
LC Fee 5-35D-47	35	040S	070W	4301353334		Fee	Indian	OW	APD
13-34D-47 LC Fee	34	040S	070W	4301353337		Fee	Indian	OW	APD
14-35D-35 BTR	35	030S	050W	4301352120		Fee	Fee	OW	DRL
6-17D-46 BTR	17	040S	060W	4301351078		Indian	Indian	OW	OPS
5-34D-35 BTR	34	030S	050W	4301351187		Indian	Fee	OW	OPS
5-10D-45 BTR	10	040S	050W	4301351221		Indian	Indian	OW	OPS
5-3D-45 BTR	3	040S	050W	4301351810		Indian	Indian	OW	OPS
9-34D-35 BTR	34	030S	050W	4301352117		Fee	Fee	OW	OPS
5-35D-35 BTR	35	030S	050W	4301352118		Fee	Fee	OW	OPS
1-2D-46 BTR	2	040S	060W	4301353086		Indian	Fee	OW	OPS
7-21-46 DLB	21	040S	060W	4301333567	16526	Indian	Indian	OW	P
LC TRIBAL 1H-27-46	27	040S	060W	4301333568	18175	Indian	Fee	GW	P
7-29-46 DLB	29	040S	060W	4301333584	17603	Indian	Fee	GW	P
LC TRIBAL 12H-28-46	28	040S	060W	4301333631	18132	Indian	Indian	GW	P
LC TRIBAL 13H-21-46	21	040S	060W	4301333632	18107	Indian	Indian	GW	P
12-36-36 BTR	36	030S	060W	4301333638	16336	Indian	Fee	GW	P
5-5-46 BTR	5	040S	060W	4301333639	16542	Indian	Fee	OW	P
5-23-36 BTR	23	030S	060W	4301333642	16675	Indian	Fee	GW	P
14-29-36 BTR	29	030S	060W	4301333643	16725	Indian	Fee	OW	P
14-30-36 BTR	30	030S	060W	4301333644	16701	Indian	Fee	GW	P
7-20-46 DLB	20	040S	060W	4301333657	16584	Indian	Indian	OW	P
LC TRIBAL 5-21D-46	21	040S	060W	4301333658	18887	Indian	Indian	OW	P
5-20-46 DLB	20	040S	060W	4301333659	18750	Indian	Indian	GW	P
LC TRIBAL 13H-20-46	20	040S	060W	4301333678	17979	Indian	Indian	GW	P
14-7-46 BTR	7	040S	060W	4301333806	16890	Indian	Indian	GW	P
7-8-45 BTR	8	040S	050W	4301333820	16974	Indian	Indian	OW	P

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

1-5-45 BTR	5	040S	050W	4301333868	16931	Indian	Indian	OW	P
5-16-36 BTR	16	030S	060W	4301333970	17195	Indian	Fee	OW	P
5-29-36 BTR	29	030S	060W	4301333972	17557	Indian	Fee	OW	P
4-30-36 BTR	30	030S	060W	4301333973	17249	Indian	Fee	OW	P
7-19-46 DLB	19	040S	060W	4301334004	19018	Indian	Indian	OW	P
5-25-36 BTR	25	030S	060W	4301334021	17126	Fee	Fee	OW	P
5-4-45 BTR	4	040S	050W	4301334089	17507	Indian	Indian	OW	P
13-2-46 BTR	2	040S	060W	4301334090	18618	Indian	Indian	OW	P
2-3-45 BTR	3	040S	050W	4301334099	17932	Indian	Indian	OW	P
7-6-45 BTR	6	040S	050W	4301334100	17653	Indian	Indian	OW	P
1-9-45 BTR	9	040S	050W	4301334101	17910	Indian	Indian	OW	P
8-10-45 BTR	10	040S	050W	4301334102	17530	Indian	Indian	OW	P
7-17-45 BTR	17	040S	050W	4301334104	17933	Indian	Indian	OW	P
16-7-45 BTR	7	040S	050W	4301334111	17665	Indian	Indian	OW	P
15-18-45 BTR	18	040S	050W	4301334112	17832	Indian	Indian	OW	P
6-12-46 BTR	12	040S	060W	4301334114	17964	Indian	Indian	OW	P
5-13-46 BTR	13	040S	060W	4301334115	17833	Indian	Indian	OW	P
16-26-36 BTR	26	030S	060W	4301334132	18028	Indian	Fee	OW	P
1-23-36 BTR	23	030S	060W	4301334136	17722	Indian	Fee	OW	P
15-10-36 BTR	10	030S	060W	4301334277	17419	Indian	Fee	OW	P
14-5-46 BTR	5	040S	060W	4301350307	17624	Fee	Fee	OW	P
14X-22-46 DLB	22	040S	060W	4301350351	17604	Indian	Indian	OW	P
16-13-36 BTR	13	030S	060W	4301350372	17853	Indian	Fee	OW	P
5-33-46 DLB	33	040S	060W	4301350397	17765	Indian	Fee	OW	P
5-34-46 DLB	34	040S	060W	4301350415	17801	Indian	State	GW	P
LC FEE 12H-32-46	32	040S	060W	4301350431	18003	Fee	Fee	OW	P
1-13D-47 BTR	13	040S	070W	4301350445	18205	Indian	Fee	OW	P
16-8D-45 BTR	8	040S	050W	4301350466	18799	Indian	Indian	OW	P
7-13D-46 BTR	13	040S	060W	4301350470	18076	Indian	Indian	OW	P
14-8D-45 BTR	8	040S	050W	4301350567	18207	Indian	Indian	OW	P
14-5D-45 BTR	5	040S	050W	4301350568	18108	Indian	Indian	OW	P
16-31D-36 BTR	31	030S	060W	4301350573	18004	Indian	Fee	OW	P
5-7D-46 BTR	7	040S	060W	4301350574	18176	Indian	Indian	OW	P
LC TRIBAL 13H-33-46	34	040S	060W	4301350575	18223	Indian	State	OW	P
5-8-45 BTR	8	040S	050W	4301350607	18279	Indian	Indian	OW	P
16-6D-45 BTR	6	040S	050W	4301350610	18177	Indian	Indian	OW	P
5-18D-45 BTR	18	040S	050W	4301350611	18300	Indian	Indian	OW	P
7-26-37 BTR	26	030S	070W	4301350641	18131	Indian	Fee	OW	P
3-11D-36 BTR	11	030S	060W	4301350642	18299	Indian	Fee	OW	P
16-1D-46 BTR	1	040S	060W	4301350675	18525	Indian	Indian	OW	P
14-3-45 BTR	3	040S	050W	4301350676	18363	Indian	Indian	OW	P



From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

4-17D-45 BTR	17	040S	050W	4301350687	18517	Indian	Indian	OW	P
5-6D-45 BTR	6	040S	050W	4301350688	18726	Indian	Indian	OW	P
7-7D-45 BTR	7	040S	050W	4301350689	18380	Indian	Indian	OW	P
14-10D-45 BTR	10	040S	050W	4301350754	18447	Indian	Indian	OW	P
14-9D-45 BTR	9	040S	050W	4301350755	18379	Indian	Indian	OW	P
13-16D-36 BTR	16	030S	060W	4301350757	18206	Indian	State	OW	P
5-9D-36 BTR	9	030S	060W	4301350843	18381	Indian	Fee	OW	P
16-5D-46 BTR	5	040S	060W	4301350844	18280	Fee	Fee	OW	P
5-27D-37 BTR	27	030S	070W	4301350847	18526	Indian	Fee	OW	P
7-4D-45 BTR	4	040S	050W	4301350884	18562	Indian	Indian	OW	P
2-16D-45 BTR	16	040S	050W	4301350899	18619	Indian	Indian	OW	P
16-10D-45 BTR	10	040S	050W	4301350902	18725	Indian	Indian	OW	P
5-2D-36 BTR	2	030S	060W	4301350913	18886	Indian	Fee	OW	P
13H-27-36 BTR	27	030S	060W	4301350918	18445	Indian	State	OW	P
8-16D-46 BTR	16	040S	060W	4301350953	19027	Indian	Indian	OW	P
16-16D-46 BTR	16	040S	060W	4301350956	19028	Indian	Indian	OW	P
16-9D-45 BTR	9	040S	050W	4301350962	18662	Indian	Indian	OW	P
14-31D-36 BTR	31	030S	060W	4301350973	18524	Indian	Fee	OW	P
5-10D-36 BTR	10	030S	060W	4301350978	18989	Indian	Fee	OW	P
1-32D-36 BTR	32	030S	060W	4301350979	18648	Indian	Fee	OW	P
16-12D-36 BTR	12	030S	060W	4301350980	18748	Indian	Fee	OW	P
2-18D-45 BTR	18	040S	050W	4301350991	18776	Indian	Indian	OW	P
3-1-46 BTR	1	040S	060W	4301351017	18777	Indian	Fee	OW	P
10-5-45 BTR	5	040S	050W	4301351062	18724	Indian	Indian	OW	P
12-4D-45 BTR	4	040S	050W	4301351063	18813	Indian	Indian	OW	P
1-10D-45 BTR	10	040S	050W	4301351064	18966	Indian	Indian	OW	P
16-2D-46 BTR	2	040S	060W	4301351079	18830	Indian	Indian	OW	P
9H-4-45 BTR	4	040S	050W	4301351092	18814	Indian	Indian	OW	P
12-17-45 BTR	17	040S	050W	4301351097	18984	Indian	Indian	OW	P
5-9D-46 BTR	9	040S	060W	4301351109	19313	Indian	Fee	OW	P
14-9D-36 BTR	9	030S	060W	4301351144	19004	Indian	Fee	OW	P
5-31D-36 BTR	31	030S	060W	4301351146	18691	Indian	Fee	OW	P
4-9D-45 BTR	9	040S	050W	4301351157	18883	Indian	Indian	OW	P
8-12D-46 BTR	12	040S	060W	4301351159	18911	Indian	Indian	OW	P
LC TRIBAL 16-23D-47	23	040S	070W	4301351180	18617	Indian	Indian	OW	P
14-7D-45 BTR	7	040S	050W	4301351222	18949	Indian	Indian	OW	P
5-16D-45 BTR	16	040S	050W	4301351223	18987	Indian	Indian	OW	P
4-5D-45 BTR	5	040S	050W	4301351242	18882	Indian	Indian	OW	P
LC TRIBAL 16H-19-45	19	040S	050W	4301351278	18627	Indian	Indian	OW	P
LC TRIBAL 13-19D-45	19	040S	050W	4301351280	18628	Indian	Indian	OW	P
LC TRIBAL 5-30D-45	30	040S	050W	4301351281	19448	Indian	Indian	OW	P

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

LC TRIBAL 15-24D-46	24	040S	060W	4301351283	18626	Indian	Indian	OW	P
LC TRIBAL 13H-24-46	19	040S	050W	4301351289	18629	Indian	Indian	OW	P
7-16-47 BTR	16	040S	070W	4301351296	18950	Indian	Fee	OW	P
14-18D-45 BTR	18	040S	050W	4301351313	19005	Indian	Indian	OW	P
LC TRIBAL 16-30D-46	30	040S	060W	4301351320	19006	Indian	Indian	OW	P
LC TRIBAL 5-20D-45	20	040S	050W	4301351331	19449	Indian	Indian	OW	P
11-8D-46 BTR	8	040S	060W	4301351336	19314	Indian	Indian	OW	P
5-7D-45 BTR	7	040S	050W	4301351350	18951	Indian	Indian	OW	P
7-5-35 BTR	5	030S	050W	4301351599	19078	Indian	Fee	OW	P
13-5D-35 BTR	5	030S	050W	4301351600	18996	Indian	Fee	OW	P
11-5D-35 BTR	5	030S	050W	4301351601	19061	Fee	Fee	OW	P
15-5D-35 BTR	5	030S	050W	4301351602	19062	Fee	Fee	OW	P
9-5D-35 BTR	5	030S	050W	4301351609	19029	Indian	Fee	OW	P
3-5D-35 BTR	5	030S	050W	4301351638	19079	Indian	Fee	OW	P
7-8-46 BTR	8	040S	060W	4301351702	19315	Indian	Indian	OW	P
7-30-46 DLB	30	040S	060W	4301351703	18997	Fee	Indian	OW	P
3-13D-46 BTR	13	040S	060W	4301351718	18881	Indian	Indian	OW	P
2-13D-46 BTR	13	040S	060W	4301351719	18885	Indian	Indian	OW	P
12-12D-46 BTR	12	040S	060W	4301351720	18867	Indian	Indian	OW	P
10-12D-46 BTR	12	040S	060W	4301351721	18856	Indian	Indian	OW	P
11-11D-47 BTR	11	040S	070W	4301352091	19633	Fee	Fee	OW	P
7-12D-47 BTR	12	040S	070W	4301352094	19600	Indian	Fee	OW	P
5-12D-47 BTR	12	040S	070W	4301352095	19634	Indian	Fee	OW	P
14-33D-35 BTR	33	030S	050W	4301352162	19450	Indian	Fee	OW	P
16-33D-35 BTR	33	030S	050W	4301352163	19451	Indian	Fee	OW	P
14-22-46 DLB	22	040S	060W	4301333660	17604	Indian	Indian	D	PA
13H-31-36 BTR	31	030S	060W	4301350465	18485	Indian	Fee	OW	PA
16X-23D-36 BTR	23	030S	060W	4301350623	18007	Indian	State	OW	PA
8-6-45 BTR	6	040S	050W	4301350900	18561	Indian	Indian	OW	PA
13-13-36 BTR	13	030S	060W	4301350919	18364	Indian	Fee	OW	PA
7-28-46 DLB	28	040S	060W	4301333569	16460	Indian	Indian	OW	S
5-21-36 BTR	21	030S	060W	4301333641	16674	Indian	Fee	GW	S
13-26-36 BTR	26	030S	060W	4301333980	17569	Indian	Fee	OW	S
14-1-46 BTR	1	040S	060W	4301334113	18516	Indian	Indian	OW	S
16-21-36 BTR	21	030S	060W	4301334130	17721	Indian	Fee	OW	S
14-21-36 BTR	21	030S	060W	4301334131	18006	Indian	Fee	OW	S
7-16-36 BTR	16	030S	060W	4301334133	17834	Indian	Fee	OW	S
1-30-36 BTR	30	030S	060W	4301334134	17905	Indian	Fee	OW	S
16-30-36 BTR	30	030S	060W	4301334135	18005	Indian	Fee	OW	S
3-23-36 BTR	23	030S	060W	4301334137	17860	Indian	Fee	OW	S
16-16-36 BTR	16	030S	060W	4301334138	17666	Indian	Fee	OW	S

From: Bill Barrett Corporation

To: Rig II, LLC

Effective 11/1/2016

4-26-36 BTR	26	030S	060W	4301334139	17620	Fee	Fee	OW	S
9-11-36 BTR	11	030S	060W	4301334276	17451	Indian	Fee	OW	S
3-36-36 BTR	36	030S	060W	4301350398	17955	Indian	Fee	OW	S
7-10-36 BTR	10	030S	060W	4301350437	18052	Indian	Fee	OW	S
16-12D-46 BTR	12	040S	060W	4301350467	18051	Indian	Indian	OW	S
13H-13-46 BTR	13	040S	060W	4301350468	18208	Indian	Indian	OW	S
13-12-46 BTR	12	040S	060W	4301350469	18233	Indian	Indian	OW	S
14-8D-36 BTR	8	030S	060W	4301350612	18163	Indian	Fee	OW	S
14-7D-36 BTR	7	030S	060W	4301350613	18330	Indian	Fee	OW	S
16-9-36 BTR	9	030S	060W	4301350645	18078	Indian	Fee	OW	S
7-27-37 BTR	27	030S	070W	4301350647	18090	Indian	Fee	OW	S
16-12D-37 BTR	12	030S	070W	4301350785	18446	Indian	Fee	OW	S
14-21D-37 BTR	21	030S	070W	4301350859	18548	Indian	Fee	OW	S
10-18D-36 BTR	18	030S	060W	4301350915	18884	Indian	Fee	OW	S
5-27D-36	27	030S	060W	4301350917	18482	Indian	State	OW	S
10-36D-36 BTR	36	030S	060W	4301351005	18523	Indian	Fee	OW	S
14-6D-45 BTR	6	040S	050W	4301351158	18967	Indian	Indian	OW	S
5H-1-46 BTR UTELAND BUTTE	6	040S	050W	4301351215	18728	Indian	Indian	OW	S
5H-1-46 BTR WASATCH	6	040S	050W	4301351216	18727	Indian	Indian	OW	S
1-25D-36 BTR	25	030S	060W	4301351294	18798	Indian	Fee	OW	S
5-5D-35 BTR	5	030S	050W	4301351605	19055	Indian	Fee	OW	S
16-23-36 BTR	23	030S	060W	4301333971	17182	Indian	Fee	OW	TA
LC TRIBAL 14-23D-47	23	040S	070W	4301334022	18616	Indian	Indian	OW	TA
5-32D-36 BTR	32	030S	060W	4301350756	18328	Indian	Fee	OW	TA



October 20, 2016

Re: Bill Barrett Corporation Transfer to New Operator

Dear Ms. Medina:

Attached please find the change of operation Form 9, Form 5's and Request to Transfer APD form changing the operator from Bill Barrett Corporation to RIG II, LLC, effective 11/1/2016. Badlands Energy – Utah, LLC will be a sub-operator.

**New Operator Contact information:**

RIG II, LLC  
1582 West 2600 South  
Woods Cross, Utah 84087-0298  
Telephone: (801) 683-4245  
Fax: (801) 298-9889

Upon reviewing the attached, please contact myself with any questions at 303-312-8115.

Sincerely,

Bill Barrett Corporation

Brady Riley  
Permit Analyst

**RECEIVED**  
OCT 21 2016  
DIV. OF OIL, GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:  
(see attached well list)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

N/A

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:  
(see attached well list)

9. API NUMBER:

10. FIELD AND POOL, OR WILDCAT:

1. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

2. NAME OF OPERATOR:

RIG II, LLC

N4055

3. ADDRESS OF OPERATOR:

1582 West 2600 South

CITY Wood Cross

STATE UT

ZIP 84087

PHONE NUMBER:

(801) 683-4245

4. LOCATION OF WELL

FOOTAGES AT SURFACE: (see attached well list)

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ NOTICE OF INTENT  
(Submit in Duplicate)

Approximate date work will start:

11/1/2016

☐ SUBSEQUENT REPORT  
(Submit Original Form Only)

Date of work completion:

☐ ACIDIZE

☐ ALTER CASING

☐ CASING REPAIR

☐ CHANGE TO PREVIOUS PLANS

☐ CHANGE TUBING

☐ CHANGE WELL NAME

☐ CHANGE WELL STATUS

☐ COMINGLE PRODUCING FORMATIONS

☐ CONVERT WELL TYPE

☐ DEEPEN

☐ FRACTURE TREAT

☐ NEW CONSTRUCTION

☒ OPERATOR CHANGE

☐ PLUG AND ABANDON

☐ PLUG BACK

☐ PRODUCTION (START/RESUME)

☐ RECLAMATION OF WELL SITE

☐ RECOMPLETE - DIFFERENT FORMATION

☐ REPERFORATE CURRENT FORMATION

☐ SIDETRACK TO REPAIR WELL

☐ TEMPORARILY ABANDON

☐ TUBING REPAIR

☐ VENT OR FLARE

☐ WATER DISPOSAL

☐ WATER SHUT-OFF

☐ OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

RIG II, LLC IS SUBMITTING THIS SUNDRY AS NOTIFICATION THAT THE WELLS LISTED ON THE ATTACHED LIST HAVE BEEN SOLD TO RIG II, LLC BY BILL BARRETT CORPORATION EFFECTIVE 11/1/2016. PLEASE REFER ALL FUTURE CORRESPONDENCE TO THE ADDRESS BELOW.

RIG II, LLC

1582 West 2600 South

Woods Cross, Utah 84087-0298

801-683-4245

(STATE/FEE BOND # 9219529/ BLM BOND # UTB000712/ BIA BOND # LPM9224670)

BILL BARRETT CORPORATION N4165

Duane Zavala

NAME (PLEASE PRINT)

Duane Zavala

SIGNATURE

Senior Vice President -

EH&S, Government and Regulatory Affairs

RIG II, LLC

Jesse McSwain

NAME (PLEASE PRINT)

Jesse McSwain

SIGNATURE

Manager

NAME (PLEASE PRINT) Jesse McSwain

TITLE Manager

SIGNATURE

Jesse McSwain

DATE

10/20/16

(This space for State use only)

APPROVED

NOV 07 2016

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**Request to Transfer Application or Permit to Drill**

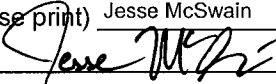
(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

<b>Well name:</b>	(See attached list)
<b>API number:</b>	
<b>Location:</b>	Qtr-Qtr:                      Section:                      Township:                      Range:
<b>Company that filed original application:</b>	Bill Barrett Corporation
<b>Date original permit was issued:</b>	
<b>Company that permit was issued to:</b>	Bill Barrett Corporation

Check one	Desired Action:
	<b>Transfer pending (unapproved) Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
<input checked="" type="checkbox"/>	<b>Transfer approved Application for Permit to Drill to new operator</b>
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If so, has the surface agreement been updated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has the approved source of water for drilling changed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is bonding still in place, which covers this proposed well? Bond No. <small>9219529-LUDGM / UTB000712-BLM / LPM9224670-BIA</small>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

Name (please print) Jesse McSwain Title Manager  
Signature  Date 10/20/16  
Representing (company name) RIG II, LLC

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.



**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

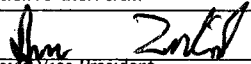
UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

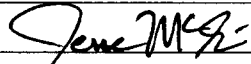
Well Name and Number <b>6-32-36 BTR SWD</b>	API Number <b>4301350921</b>
Location of Well  Footage : <b>1628 FNL 1553 FWL</b> County : <b>DUCHENSE</b>  QQ, Section, Township, Range: <b>SENW    32    3S    6W</b> State : <b>UTAH</b>	Field or Unit Name <b>CEDAR RIM</b>  Lease Designation and Number <b>2OG0005608</b>

**EFFECTIVE DATE OF TRANSFER:** 11/1/2016

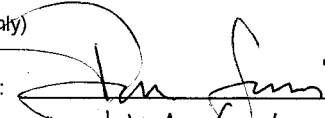
**CURRENT OPERATOR**

Company: <u>BILL BARRETT CORPORATION</u>	Name: <u>Duane Zavadii</u>
Address: <u>1099 18th Street Ste 2300</u>	Signature: <u></u>
city <u>DENVER</u> state <u>CO</u> zip <u>80202</u>	Title: <u>Senior Vice President -</u>
Phone: <u>(303) 293-9100</u>	Title: <u>EH&amp;S, Government and Regulatory Affairs</u>
Comments:	Date: <u>10/20/16</u>

**NEW OPERATOR**

Company: <u>RIG II, LLC</u>	Name: <u>Jesse McSwain</u>
Address: <u>1582 West 2600 South</u>	Signature: <u></u>
city <u>Wood Cross</u> state <u>UT</u> zip <u>84087</u>	Title: <u>Manager</u>
Phone: <u>(801) 683-4245</u>	Date: <u>10/20/16</u>
Comments:	

(This space for State use only)

Transfer approved by:   
Title: UIC Geologist

Approval Date: 11/3/16

Comments:

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

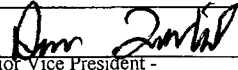
TRANSFER OF AUTHORITY TO INJECT

Well Name and Number 16-6D-46 BTR SWD	API Number 4301350781
Location of Well Footage : 0200 FSL 0099 FEL County : DUCHESNE QQ, Section, Township, Range: SESE 6 4S 6W State : UTAH	Field or Unit Name ALTAMONT Lease Designation and Number 20G0005608

EFFECTIVE DATE OF TRANSFER: 11/1/2016

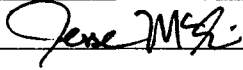
CURRENT OPERATOR

Company: BILL BARRETT CORPORATION  
Address: 1099 18th Street Ste 2300  
city DENVER state CO zip 80202  
Phone: (303) 293-9100  
Comments:


Name: Duane Zavadii  
Signature:   
Senior Vice President -  
Title: EH&S, Government and Regulatory Affairs  
Date: 10/20/16

NEW OPERATOR

Company: RIG II, LLC  
Address: 1582 West 2600 South  
city Wood Cross state UT zip 84087  
Phone: (801) 683-4245  
Comments:

Name: Jesse McSwain  
Signature:   
Title: Manager  
Date: 10/20/16

(This space for State use only)

Transfer approved by:   
Title: VIC

Approval Date: 11/3/16

Comments:

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

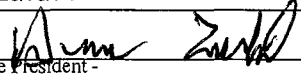
UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

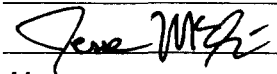
Well Name and Number <b>SWD 9-36 BTR</b>	API Number <b>4301350646</b>
Location of Well  Footage : <b>0539 FSL 0704 FEL</b>  County : <b>DUCHESNE</b>  QQ, Section, Township, Range: <b>SESE 9 3S 6W</b>  State : <b>UTAH</b>	Field or Unit Name <b>CEDAR RIM</b>  Lease Designation and Number <b>2OG0005608</b>

**EFFECTIVE DATE OF TRANSFER:** 11/1/2016

**CURRENT OPERATOR**

Company: <u>BILL BARRETT CORPORATION</u>	Name: <u>Duane Zavadi</u>
Address: <u>1099 18th Street Ste 2300</u>	Signature: <u></u>
city <u>DENVER</u> state <u>CO</u> zip <u>80202</u>	Title: <u>Senior Vice President - EH&amp;S, Government and Regulatory Affairs</u>
Phone: <u>(303) 293-9100</u>	Date: <u>10/20/16</u>
Comments:	

**NEW OPERATOR**

Company: <u>RIG II, LLC</u>	Name: <u>Jesse McSwain</u>
Address: <u>1582 West 2600 South</u>	Signature: <u></u>
city <u>Wood Cross</u> state <u>UT</u> zip <u>84087</u>	Title: <u>Manager</u>
Phone: <u>(801) 683-4245</u>	Date: <u>10/20/16</u>
Comments:	

(This space for State use only)

Transfer approved by: \_\_\_\_\_ Approval Date: \_\_\_\_\_

Title: \_\_\_\_\_

Comments:

*This well was approved by USEPA.  
EPA approval will be required.*